# Links für 2024 KW 33

Zusammengefasst von LlongOrca.

# What if Germany had invested in nuclear power? A comparison between the German energy policy the last 20 years and an alternative policy of investing in nuclear power:

The article compares Germany's current energy transition policy, Energiewende, with an alternative policy of investing in nuclear power. It states that if Germany had kept existing nuclear power plants in 2002 and built additional nuclear capacity, the country could have reduced its climate gas emissions by 73% instead of the 25% achieved through VREs and other renewables. The article argues that investing in nuclear power would have been more cost-effective and efficient in achieving Germany's climate goals. However, it's important to note that the article assumes ideal circumstances and does not consider various political and economic aspects.

## Python Bans Prominent Dev for Enjoying the Wrong Old SNL Sketch:

A new lawsuit against Intel Corporation alleges that the tech giant has become anti-Jewish and anti-Israeli. According to the suit, an Intel Vice President praised attacks by Hamas and the company reassigned a Jewish employee with family living under rocket fire from Hamas to report directly to this Vice President, who then fired him for complaining about working for someone advocating for his death. The lawsuit also claims that Intel replaced the former employee with another person expressing hate for Israel.

## Python Bans Prominent Dev for Enjoying the Wrong Old SNL Sketch:

The article discusses an incident where a well-known developer, Guido van Rossum (the creator of the Python programming language), was suspended from the Python Software Foundation's (PSF) Code of Conduct Working Group for three months due to allegedly violating their code of conduct. However, the reasons behind the suspension remain vague, leading some to believe it is a case of unfair power-grabbing by the PSF. The author argues that this situation showcases the potential dangers of overly restrictive codes of conduct and raises concerns about the impartiality of those enforcing them.

## Low level of common nutrient linked to disease-causing DNA damage:

A new study conducted by researchers at the University of South Australia found a direct correlation between low magnesium levels in blood and increased DNA damage. The study examined blood samples from 172 middle-aged adults and discovered that those with low magnesium also had high levels of an amino acid called homocysteine, which is considered genotoxic and can cause human DNA damage. High magnesium levels were found to have a positive relationship with folate and vitamin B12. The researchers believe the damaging results of low magnesium are due to its role in breaking down the body's ability to produce energy and power cells, which can lead to faster tissue aging. Magnesium is essential for maintaining DNA and RNA health and is involved in over 300 enzyme systems in the body. The FDA recommends adults between ages 31-50 get 420 mg of magnesium per day.

## Air Quality Monitors Compared: AirGradient ONE vs Airthings:

The article compares Airthings' View Plus air quality monitor to the AirGradient ONE indoor air quality monitor. Both monitors have similar sensors for measuring pollutants, but the Airthings View Plus has a radon sensor while the AirGradient ONE has a NOx sensor. The Airthings View Plus is battery-powered and can connect to WiFi, whereas the AirGradient ONE uses WiFi exclusively and requires a paid subscription for advanced features. The article highlights some drawbacks with the Airthings View Plus, such as the lack of manual recalibration and the restrictive terms and conditions regarding data ownership. In contrast, the AirGradient ONE is open-source hardware and allows users to own their data.

## Haushaltslücken - keine neue Militärhilfe für die Ukraine?:

The German government is reportedly stopping new military aid to Ukraine due to budget constraints. According to the Frankfurter Allgemeinen Sonntagszeitung (FAS), Germany, one of Ukraine's main supporters and largest financial contributors for military aid, will no longer provide additional assistance after the current budget allocation has been exhausted. This decision comes as Germany struggles with financial issues, causing concerns over potential financial penalties from the European Union. While the German government may not be providing new funding, they expect to continue supporting Ukraine through other means such as repurposing funds from frozen Russian assets.

## Why do people believe true things?:

This article argues that acquiring a good sense of which things demand explanation is equally important as being well-informed. The ability to generate plausible explanations is essential, but understanding which events and situations are genuinely surprising or puzzling is crucial. The article uses examples from history and social epistemology to illustrate this point and emphasizes the importance of understanding that knowledge and truth are fragile achievements that require the support of complex institutions and norms. It also highlights the need for intellectual humility and acknowledging the many sources of error, bias, and partiality in human judgment that can lead to ignorance and misperceptions.

# Postmortem of my 9 year journey at Google:

The article is a retrospective by a former Google employee who spent nine years at the company. They began their software career as an intern and went on to work in several teams around Bigtable, Persistent Disk, and GCE VMs. During their time at Google, they experienced both ups and downs, such as reaching financial goals, industry saturation, and personal growth. The employee decided to leave Google due to factors including a desire to start their own company, budget cuts, and a shift in personal interests. Overall, the experience was described as incredible but also included challenges like cognitive load and an overwhelming 24/7 nature of the organization.

#### 'Kafkaesque': bank blocks cash transfer, saying it could be an AI scam:

John MacInnes, an Edinburgh academic, accused Starling bank's fraud team of behaving like a police state after they repeatedly refused to allow him to send €15,000 (£12,800) payment to a friend in Austria and then froze his account. MacInnes says he was astonished by the treatment from staff at the challenger bank. The article highlights that some banks are now going to extreme lengths to prevent fraud for which they can be held responsible. Despite understanding the need for banks to protect customers from money laundering and scams, MacInnes felt the demand to share personal correspondence was a gross invasion of privacy. After Guardian Money's intervention, Starling bank unblocked the account and allowed the payment to proceed, promising an investigation into MacInnes' complaint and improvements in their processes and procedures for other customers.

#### Brain found to store three copies of every memory:

A study by researchers at the University of Basel's Biozentrum revealed that brains use three different sets of neurons to store a single memory, similar to computer systems with built-in redundancies. By imaging mice brains, they discovered that early-born neurons were used first for memory formation and became stronger over time, while late-born neurons initially held a strong copy but faded over time. The middle group showed higher stability. This discovery could lead to treatments for individuals who have suffered trauma, potentially helping to modify or reduce painful memories.

## You Can Gaslight Yourself Into Loving Someone:

This article discusses how love and having a crush can be similar to an addiction towards a person. The author suggests that the information age has increased our exposure to various personalities, leading some people to become more judgmental and picky in choosing partners. However, the author believes that there is more choice than we think when it comes to finding the perfect partner.

The article also touches upon the concept of gaslighting, explaining that it's not a well-defined term but generally involves convincing someone of something untrue using a position of trust and authority. The author suggests that this process can be used for more things, such as replacing an incorrect view of the world with another possibly incorrect one.

The article discusses the importance of self-criticism in determining if our view of the world is accurate or not. It highlights the risks associated with forming a detached image of a person and pursuing a relationship based on that image, potentially leading to resentment or attachment to abusive relationships.

The author concludes by stating that thinking about love can be dangerous, but if done consciously and in moderation, it can help people find attachment with others. They also mention the importance of introspection and self-improvement as a service to oneself and potential future partners.

# Study shows a mouse brain under stress sends messages to the gut that reduce levels of beneficial bacteria:

A team of medical researchers from the U.S., China, and Germany discovered that when a mouse feels stressed, its brain sends signals to a gut gland called Brunner's glands, which results in the elimination of bacteria that prevents inflammation and an unnecessary immune response. The study, published in Cell, investigated the communication between the mouse brain and Brunner's glands in the mouse gut. The researchers found that the nerve cells in these glands were connected directly to the vagus nerve, which leads to the amygdala - a part of the brain involved in processing stress. This finding highlights the complex interplay between the brain and the gut during times of stress.

## X says it is closing operations in Brazil due to judge's content orders:

The summary of the article is as follows: Twitter has decided to close its operations in Brazil due to censorship orders from Brazilian judge Alexandre de Moraes. The decision comes after a long-standing dispute between the social media platform and the Brazilian government over content moderation. In response, Elon Musk tweeted that "Brazil's Supreme Court just blocked my Twitter account for criticizing their actions against X." He also accused the court of secretly threatening one of its legal representatives in Brazil with arrest if it did not comply with legal orders to take down some content from its platform. The move is seen by many as a power move and a way for Musk to avoid complying with regulations he disagrees with. While some argue that Twitter should have complied with the requests, others believe that the court's actions are an overreach of their power and infringe on freedom of speech rights. Ultimately, it remains to be seen how this decision will impact both Twitter and the Brazilian government moving forward.

## Ask HN: Do we need to pay billions in fees to Stripe, Block, PayPal and Visa/MC?:

The discussion revolves around the necessity and feasibility of creating competition for companies like Stripe, Block, and PayPal in the digital payments space. The author argues that these companies are overcharging and that there is a need for more affordable alternatives. However, others point out the complex infrastructure required to handle fraud, chargebacks, and other aspects of digital payments, making it difficult for new players to enter the market. Some examples of local payment systems in different countries, such as iDeal in the Netherlands and PIX in Poland, are mentioned as potential alternatives. The author also questions whether there is a need for a rival company when solutions like UPI in India already exist. Overall, the debate highlights the challenges of creating a new digital payments system that can compete with established players while offering lower fees and better services to consumers and businesses.

# Al stole my job and my work, and my boss didn't know or care:

This article discusses how Cosmos Magazine, an Australian science publication, used grant money to develop an AI system that generated articles for their website. The AI was fed content from contributors who were not consulted about the project and did not retain copyright over their work. The author of this article, who lost his writing gig at Cosmos, discovered that he had been replaced by a robot created to mimic him. The publication's editors-in-chief had no knowledge of this move. The article argues for greater transparency in AI content creation and emphasizes the importance of

maintaining human touch in written works.

## The sentinel toothpaste: a useful programming technique for everyday life:

The article introduces a programming technique called the "sentinel value," which is useful in daily life and helps manage toothpaste tubes. In computer science, a sentinel value is a special item used to mark the end of a list or string of items. For instance, null-terminated text strings use the null character (\0) as the sentinel value. The author explains that they have found this programming technique helpful in managing their daily toothpaste supply by using a distinct tube as the "sentinel" toothpaste, indicating when it's time to buy more.

## Releasing everyone's SSN and the hacks used to acquire them:

This conversation is a mix of jokes and serious discussions about a GitHub PR to "rewrite it with Rust" that claims to have all credit card PIN codes in the world leaked, as well as SSNs and passwords. The conversation highlights concerns over identity fraud and potential solutions such as asymmetric key authentication or freezing credit. It also touches on the re-use of Social Security Numbers (SSN) and how they are handled by government systems.

#### everyone-ssn-usa:

This article discusses the release of everyone's Social Security Numbers (SSN) and the hacks used to acquire them under an MIT license. It has received 209 stars and 20 forks, with various branches and tags related to its activity. To modify notification settings or perform certain actions, a user must be signed in.

## **Understanding Intel:**

This article explores Intel's business model and its recent bad quarter and unexpected layoffs. It discusses Intel's two main departments - design group and manufacturing arm - and how the company has been losing its manufacturing lead, resulting in lower margins and a weakened brand. The article also highlights that Intel's strategy differentiators are its manufacturing capabilities, x86 lock-in, and branding. To overcome these challenges, Intel launched a major strategy overhaul plan called "Five Nodes in Four Years," aimed at regaining technology leadership and adding structural accountability to the company.

## Private Internet - Kevin Cox:

The article discusses the issues with various internet protocols, particularly IP, due to their lack of security considerations when they were designed. It highlights privacy concerns and DoS susceptibility as significant flaws that should be addressed in these protocols. The author also brainstorms properties for a private and DoS-resistant network protocol, such as non-sensitive client

addresses, revocable connections, encrypted traffic, and fine-grained routing. These proposed features aim to address the current issues with internet protocols and improve security on the modern internet.

## The spies in your home: How WiFi companies monitor your private life | Proton:

Plume Design Inc., a company that has emerged as a significant player in the mesh WiFi market, is reportedly providing surveillance-enabled products to internet service providers (ISPs). This allows them to monitor and gather extensive data about its users without directly monetizing individual user data. The US Federal Trade Commission released an extensive report in 2021 that exposed the widespread practice of ISPs collecting data, and Plume is part of a larger ecosystem where personal data is turned into a commodity. In order to protect your privacy and data, you can use Proton VPN on all capable devices, look out for Plume products, use "dumb" WiFi routers, or flash your router with open-source firmware such as DD-WRT or OpenWRT.

## It is dangerously easy to hack the world's phones:

This article discusses various scientific advancements and concerns. It mentions a new age of sail beginning with the AirFish, a fast ferry that will fly above waves. A promising non-invasive technique is also highlighted for helping paralyzed limbs move. Additionally, it covers potential dangers in global communications due to snooping and an art gallery in Bangalore aiming to make research and tinkering more accessible. The article also explores the possibility of climate change reviving harmful invasive plants, AI scientists creating new theories about brain learning, the benefits of sun's UV radiation, engineered dust making Mars habitable, and stretchable batteries inspired by electric eels.

# National Public Data admits it leaked Social Security numbers in a massive data breach:

National Public Data (NPD), a company involved in reselling personal data for background checks, has confirmed a data breach affecting its systems. The incident reportedly occurred in late December 2023, with potential leaks in April and summer of the same year. A dark web forum post advertised stolen data from NPD, but the company remained silent until it published a Security Incident page this week. The breach is believed to have included names, Social Security numbers, physical addresses, email addresses, phone numbers, and mailing addresses for 2.9 billion rows of data. NPD has not revealed how many people were affected or offered any compensation, only advising individuals to monitor their credit reports.

# Disney's not alone in saying your clicks means you can't sue | CNN Politics:

In a recent lawsuit, Walt Disney World is arguing that a contract a widower signed when signing up for the Disney+ streaming service means that a wrongful death lawsuit he brought against Disney and a restaurant not owned by Disney cannot go forward in court. This case highlights the increasingly aggressive strategies companies are using to steer lawsuits they face from consumers into arbitration, a private legal process which is viewed as disadvantaging plaintiffs. The Supreme Court may need to address the issue of "infinite arbitration clauses" in contracts that try to cover any possible dispute a consumer could bring against a company.

#### Good programmers worry about data structures and their relationships:

The article discusses the importance of designing code around data structures, rather than vice versa, as stated by Linus Torvalds. This approach helps make software more reliable, understandable, and easier to read. Investing time in creating well-thought out data models makes migrations and building on complex systems easier in the long run. The article also highlights how choosing complexity in data structures over code complexity can lead to better results. It emphasizes the significance of having a strong high-level approach for data flow and component interactions before diving into more detailed code-related details.

#### T-Mobile fined \$60M for unauthorized access to data, the largest fine of its type - 9to5Mac:

T-Mobile has been fined \$60M by the Committee on Foreign Investment in the US (CFIUS) for failing to prevent unauthorized access to sensitive data and not reporting the failure. The fine is the largest ever issued by CFIUS, which monitors and controls national security implications of foreign companies making business investments in the US. The committee found T-Mobile breached conditions imposed on its purchase of Sprint in 2020 by failing to adequately secure data and not reporting unauthorized access.

#### .kkrieger:

.kkrieger is a first-person shooter video game created by German demogroup theprodukkt (a former subdivision of Farbrausch). The game has never been fully released and remains in beta stage development as of 2024. It was developed since mid-2002 using the tool .werkkzeug, which uses procedural generation methods to reduce file size. .kkrieger won two German game developer prizes at the Deutscher Entwicklerpreis in 2006 and received a mixed review from Acid-Play.

## What Is a Knowledge Graph? - Graph Database & Analytics:

A knowledge graph is an organized representation of real-world entities and their relationships, typically stored in a graph database. It stores data and relationships alongside organizing principles or frameworks that provide a flexible, conceptual structure for deeper data insights. The design is useful for various usage patterns, including real-time applications, search and discovery, and grounding generative AI for question-answering. Knowledge graphs can be built with different scopes to solve specific use-case problems. Key components of a knowledge graph data model include nodes (entities), relationships (connections between entities), and organizing principles that categorize the data and relationships. Property graphs, such as Neo4j, are a suitable choice for implementing knowledge graphs due to their native storage capabilities and intuitive visualization of highly interconnected data structures.

## Jim Collins - Concepts - The Flywheel Effect:

The article compares two types of progress: a smooth and consistent journey like pushing a flywheel (which ultimately gains speed through consistent effort) and an abrupt, seemingly revolutionary transformation like an egg becoming a chicken. The author suggests that while it may appear from the outside that breakthroughs are sudden, they are usually the result of consistent efforts over time. In contrast, companies that try to jump to a breakthrough with one grand program often fail and fall into what's called the doom loop.

#### MIFARE Classic: exposing the static encrypted nonce variant [pdf]:

The article discusses the vulnerability of MIFARE Classic RFID cards, which have a hardware backdoor that enables anyone with knowledge of it to compromise all user-defined keys on these cards without prior knowledge. The authors discovered this issue through empirical research and found another hardware backdoor key common to several manufacturers in older cards. This highlights the importance of rethinking how we secure access to critical systems, especially in industrial environments. One possible solution presented is Unified Air by Siemens, which allows factory workers to authenticate using biometric sensors on their mobile devices, eliminating the need for insecure RFID cards altogether.

## America is sabotaging itself in the global battle for talent:

This article quotes Donald Trump as saying, "You graduate from a college, I think you should get, automatically as part of your diploma, a green card [permanent residence in the United States]." The statement implies that even nativist politicians may recognize the value of highly skilled foreigners.

## PyTorch is dead. Long live JAX.:

The article argues that PyTorch has been a net negative for scientific computing efforts due to its design not being suitable for large-scale distributed clusters and scaling well in a fault-tolerant manner. It suggests that DeepMind's JAX is a more appropriate framework for such use cases, providing better scalability, reproducibility, portability, auto-scaling, and functional API features compared to PyTorch. The author also highlights some of the limitations and "sharp edges" of JAX but advocates for rewriting codebases in JAX for improved efficiency in scientific computing efforts.

## Introduction - A Ninja's Handbook:

The book discussed in the article is dedicated to individuals who actively work towards anonymity and privacy on the internet. It highlights how every entity in the digital world seeks to protect its data, regardless of whether they admit it or not. Privacy is seen as a human right that should not be taken away from anyone, but it is continuously violated by various entities such as companies, governments, and spy agencies. The author compares privacy with insurance, arguing that protecting oneself against potential future harm isn't paranoia. The book emphasizes the importance of both privacy and security to maintain anonymity and suggests that readers can support the project by

making donations if they find it helpful.

## Microsoft is finally removing the FAT32 partition size limit in Windows 11:

Microsoft is planning to remove the 32GB size limit for FAT32 partitions in Windows 11, allowing volumes up to 2TB. The limit has been in place for nearly 30 years and was originally implemented during the development of Windows 95. While Windows has long supported reading FAT32 partitions up to 2TB in size, users had to rely on third-party tools to create these volumes until now. There is still a 4GB limit on individual files stored on a FAT32 volume.

## The Tenth Man Rule: How to Take Devil's Advocacy to a New Level:

The Tenth Man Rule, featured in the 2013 film World War Z, is an example of using the contrarian perspective to challenge groupthink and improve decision-making. This method suggests that if nine people agree on a decision, the tenth person should take a different viewpoint and assume the others are wrong. The Tenth Man Rule has its roots in devil's advocacy, which encourages someone to argue against a widely accepted or dominant point of view. However, it is important not to allow dissent to become destructive or unproductive, as it can lead to internal conflicts within an organization. Alternative methods such as Red Team Analysis and Premortem Analysis could also be considered to foster healthy debate and critical thinking in decision-making processes.

# The Day Github Almost CrowdStriked Us All (Again) - The Miners:

The world of tech startups is always looking for the next unicorn, and in the case of GitHub, a major incident occurred on August 14, 2024, causing services to go down momentarily. This outage triggered a chain reaction, resulting in 24 hours and 11 minutes of service degradation. Despite these incidents, there have been improvements made since the 2018 incident, such as enhancements in infrastructure redundancy, the Orchestrator system, and physical layout of data centers. The article concludes by emphasizing the importance of learning from these experiences to reduce the chances of similar problems occurring in the future.

## Tom Cruise is dangerous and irresponsible:

Actor Tom Cruise has publicly criticized psychiatry and the mental health profession in several interviews, stating that postpartum depression cannot be treated pharmacologically and calling it a "quack" field. He has also claimed to know the literature on the history of psychiatry, chemical imbalances, and Ritalin. Tom Cruise's statements have been disputed by various sources, as they are considered irresponsible and factually incorrect. Some of his claims include that Ritalin is an amphetamine, SAT scores have gone down due to the use of ADHD drugs, and postpartum depression does not exist. Cruise's belief in Scientology's philosophy on medicine and mental health has led him to advocate for unconventional treatments such as vitamin supplementation instead of pharmacotherapy for mental illnesses.

#### MDR+: Livestream: Sprengung der Kühltürme am AKW Grafenrheinfeld - hier anschauen:

On Friday, in Grafenrheinfeld, Bavaria, the cooling towers of a nuclear power plant will be demolished by a Thuringian blasting master. 34,000 tons of concrete are expected to collapse within 30 seconds.

#### Aristotle — How to live a good life - Ralph Ammer:

Aristotle's Nicomachean Ethics provides an operating manual for a good life, focusing on the unique characteristics of humans which include a soul that thinks and feels. For a human to lead a good life, they must have an excellent soul exhibiting clear intellect and noble character. Aristotle identified several theoretical virtues such as art, intelligence, scientific knowledge, prudence, and wisdom. He also emphasized the importance of a good character by finding the right mean between two extremes in various situations. Happiness is not just about feeling pleasure; it is about the pursuit of excellence through virtuous actions that fulfill one's nature as a human soul with a clear intellect and noble character.

## **Pixel smartphones delivered with secret but inactive remote maintenance**:

Millions of Pixel phones have been shipped with remote maintenance software that makes them vulnerable to spyware, but only if the perpetrator has physical access to the device, enters the user's password, and knows how to activate the normally invisible and inactive software. The remote maintenance software was installed at Verizon's request since the Pixel phones were launched in 2017 for demonstration purposes in their sales outlets. It is unclear whether Android phones other than Pixel are affected. An update that removes the inactive software is in the works and will be made available to all affected OEM manufacturers. The discovery of Showcase.apk highlights the need for greater transparency around third-party apps included in operating systems.

#### Gradle Documentation: Using Shared Build Services:

The article discusses the concept of shared build services in Gradle, which allows tasks to share state or resources. It provides an overview of how to implement, use, and configure build services, as well as considerations for using them in conjunction with the Worker API, configuration actions, and other build services. Additionally, it explains how to receive information about task execution via events and registration with the BuildEventsListenerRegistry service.

## ThinkSystem NVIDIA L40S 48GB PCIe Gen4 Passive GPU Product Guide:

This article discusses updates to various aspects of a device. The May 24, 2024 update added a note that DisplayPort ports are disabled by default in the technical specifications section. The December 15, 2023 update mentioned support for L40S in SR665 V3 and SR650 V3 servers. On November 3, 2023, OS support information was added to the operating system support section. The article was first published on September 12, 2023.

#### We're Cutting L40S Prices In Half:

This article discusses how NVIDIA GPUs are being used in AI workloads and their popularity among customers. Despite having newer, more powerful models available, the A10 is the most sought-after GPU due to its affordability and efficiency for random inference tasks and mid-sized generative AI work. The article also highlights Fly.io's strategy in providing GPU resources based on actual customer data and how the L40S model offers similar performance as the A100 at a lower price, making it an attractive choice for users.

#### The Shameful Defenestration of Tim:

Tim Peters, a long-time contributor and Python core developer, was suspended for three months due to overloading discussions on bylaws changes and potentially offensive language use on the Python mailing list. The suspension followed several accusations against him, including defending "reverse racism" and "reverse sexism," excessive discussion of controversial topics or past conflicts, and using potentially offensive terms. Tim's contributions to the Python community were significant, but his recent actions led to a recommendation from the Python Software Foundation's Code of Conduct Workgroup for him to be suspended.

#### h94/IP-Adapter-FaceID · Hugging Face:

This article introduces the experimental version of IP-Adapter-FaceID, an AI model that generates various style images conditioned on a face using face ID embedding instead of CLIP image embedding. The model uses LoRA to improve ID consistency and has seen updates with face ID embedding (for face ID) + CLIP image embedding (for face structure). The IP-Adapter-FaceID can be used for non-commercial research purposes only, as per the InsightFace pretrained models' license.

#### nothingiisreal/MN-12B-Celeste-V1.9 · Hugging Face:

The article discusses a story writing and roleplaying model trained on Mistral NeMo 12B, which has improved NSFW, smarter narration, and better context using Reddit Writing Prompts, Kalo's Opus 25K Instruct and c2 logs cleaned. It is recommended to use ChatML tokens for a better experience with no EOS bleeding. The model can handle long and short messages, SFW or NSFW, and can be steered using OOC prompts.

#### tiiuae/falcon-mamba-7b-instruct · Hugging Face:

The FalconMamba Instruct model is a causal decoder-only language model developed by TII. It belongs to the Mamba architecture family and is mainly designed for English NLP tasks. The model has been trained with around 5,500 GT data from RefinedWeb. To achieve comparable throughput and performance, it utilizes optimized kernels such as Flash Attention 2. FalconMamba-7B can be installed using the "causal-conv1d>=1.4.0" and "mamba-ssm" commands.

## Bay Area's Cisco reveals \$10.3B yearly profit, thousands of layoffs:

The tech giant Cisco Systems has announced that it is laying off 7% of its workforce, affecting at least 5,500 workers. The company claims that this move is aimed at allowing it to invest in key growth opportunities and drive more efficiency in its business. Cisco has also recently revealed its earnings for its last fiscal year, reporting a total revenue of \$53.8 billion and a profit of \$10.3 billion.

#### Kim Dotcom: The Untold Story | Digitalwelt:

Kim Dotcom, a notorious cybercriminal, has been involved in various hacking activities since the mid-1990s as part of the Release Scene. In 2024, he faces potential extradition to the United States for racketeering, conspiring to commit copyright infringement, and conspiring to commit money laundering. The article provides an overview of Dotcom's activities, including his involvement with T-Mobile, the Chaos Computer Club, and the founding of companies like Data Protect and Kimvestor.

#### Artists Score Major Win in Copyright Case Against AI Art Generators:

A federal judge in San Francisco has allowed key claims to move forward in a lawsuit against generative artificial intelligence art generators for the uncompensated and unauthorized use of billions of images downloaded from the internet to train AI systems. U.S. District Judge William Orrick advanced all copyright infringement and trademark claims, finding that Stable Diffusion, which creates hyperrealistic images in response to a prompt of just a few words, may have been "built to a significant extent on copyrighted works" and created with the intent to facilitate infringement. The case will move forward to discovery where artists could uncover information related to how AI firms harvested copyrighted materials that were used to train large language models.

# It's the Land, Stupid: How the Homebuilder Cartel Drives High Housing Prices:

This article discusses the politics of monopoly power in homebuilding, focusing on land ownership and consolidation among major players in the industry. It highlights how big builders like D.R. Horton and Lennar dominate local markets, benefiting from capital, construction supplies, labor, and access to land at lower costs than smaller or new entrants. The article suggests that policy interventions such as equalizing credit access for developers and imposing land limitations could help increase housing supply and address the issue of consolidation in homebuilding.

# openbmb/MiniCPM-V-2\_6 · Hugging Face:

The latest model in the MiniCPM-V series, MiniCPM-V 2.6, is a highly capable multimodal language model with significant performance improvements over its predecessors. It exhibits leading performance on various benchmarks, including OpenCompass and multi-image benchmarks such as Mantis-Eval, BLINK, Mathverse mv, and Sciverse mv. Additionally, it demonstrates strong OCR capabilities and outperforms other models in video understanding. MiniCPM-V 2.6 is available for

various usage methods, including llama.cpp, int4 quantized models, vLLM support, fine-tuning on new domains and tasks, quick local WebUI demo setup, and online web demo.

#### Private, Secure and Uncensorable Messaging Over a LoRa Mesh:

The article describes how two people, Alice and Bob, can set up an independent, encrypted communication system using a LoRa mesh network for under \$100. The system allows real-time and asynchronous text message communication between them. It is completely private and outside the reach of automated surveillance. Reticulum, a flexible networking platform, helps build this system that can use almost anything as a carrier for digital information transfer. Nomad Network and Sideband are used for user-facing software to communicate with each other.

## mettermalt® Fools Garden Whisky Jubiläumsedition - Fessler Mühle:

The mettermalt® Fools Garden Whisky is a limited anniversary edition celebrating the 625th anniversary of the Fessler Mühle and 30 years of Fools Garden. The whisky is made from wheat and malted barley, which is milled using the mill's own 1870 stone grinder. It is then aged for four years in ex-Scotch and ex-Bourbon casks. The water comes from a local source, and the production process is climate neutral through the use of hydroelectric power and photovoltaics. With an alcohol content of 43% and a natural color, the whisky was bottled as a single cask fill. It received the Gold award at the Landkreis Prämierung in 2022, 89 out of 100 points from Jim Murray's Whisky Bible 2022, and Silver at the Landesprämierung in 2023. The Fools Garden Lemon Tree Gin is also available. For more information about their whiskies, visit the website.

## **Exact Polygonal Filtering**:

The article discusses efficient filtering techniques for polygonal shapes using closed-form solutions based on Green's theorem with piecewise-polynomial filters such as box/bilinear/bicubic. It introduces the concept of rasterization, which involves converting vector graphics into pixel data. To achieve accurate filtering effects without relying on pixel approximations or super-sampling, polygons can be broken up into smaller clipped polygons and their filter integrals evaluated directly for each clipped polygon. This process can be done on the GPU, as demonstrated in WebGPU.

## No tax on tips: Why politicians love it, and economists don't:

Vice President Kamala Harris and former President Donald Trump both support eliminating taxes on tips for service and hospitality workers. During a campaign rally in Nevada, Harris promised to continue the fight for working families and eliminate taxes on tips if she becomes president. Trump has been campaigning on this policy since June after hearing from a Las Vegas server about the government's cut from her tipped wages. The idea of no tax on tips is gaining bipartisan political support, but critics argue that it would disproportionately benefit some employees and cause problems in terms of equity, efficiency, and revenue.

#### How to Install and Run LLMs Locally on Android Phones:

The MLC Chat app allows users to download and run Al models on their Android devices locally. It offers several Al models, including Gemma 2B, Phi-2 2B, Mistral 7B, and the latest Llama 3 8B model. While some Snapdragon phones can provide good performance, older devices might generate close to 3 tokens per second. The app currently uses the CPU alone for inference on all Snapdragon devices, but with Qualcomm Al Stack implementation, Android devices can leverage NPUs and GPUs to offer better performance in the future.

#### Women are using ChatGPT to catch men lying about their height:

Social media users have discovered that ChatGPT can be utilized to reveal men's true height on dating apps like Tinder or Hinge. The AI tool provides surprisingly close estimates when given photos, with some accuracy depending on the snapshot used. This use of AI has sparked mixed feelings, as it may help women detect lies about men's height, but also raises privacy concerns.

#### Fefes Blog:

The article discusses Intel's current situation and suggests that the best people to let go are engineers from the semiconductor works. It is mentioned that we live in a "Clever & Smart-Comic!", implying some lightheartedness or sarcasm towards the topic.

## You Seem Too High in Openness!:

The use of personality clues during the hiring process can help identify potential risk factors that may lead to suboptimal job performance. Personality traits are generally independent of factors like cognitive ability and domain knowledge, making them valuable insights during the hiring process. However, employers must understand that there is no perfect personality profile for every role, as some positive traits can become liabilities in certain positions. Interviewers should be aware that candidates will likely emphasize their desirable qualities and downplay potential weaknesses, so direct questions about conscientiousness or agreeableness may not yield meaningful insights. Instead, interviews should focus on understanding how the candidate's traits align with specific job requirements, while considering both positive and negative aspects of each trait.

## Visual Data Structures Cheat-Sheet:

This article provides a visual overview of various key data structures used in computer science with applications in the real world. The author explains concepts like Big O Complexity, RUM trade-off, and important data structures such as Array & Linked List, Queue, Stack, Hash Map, Tree Based Data Structures (Binary Search, Binary-Search Tree, Red-Black Tree, AVL Tree, Heap, Skip List, B+ Trees, LSM Tree, Binary Index Tree/Fenwick Tree), Graph Data Structures, String-Search Data Structures (Trie, Radix Tree, Splay Tree, Spatial Trees), and other data structures & diagrams. The article also

covers algorithms for spatial search and data integrity verification like Merkle Trees, Bloom Filters, and Binomial Heap.

## Agile is for losers - Hypermatic:

The article discusses the misuse and over-simplification of Agile in digital agencies, which has led to numerous project failures. It argues that adopting a one-size-fits-all approach to implementing Agile principles with a predefined framework like Scrum is counterproductive and damaging. Instead, the author suggests thinking for oneself and finding solutions that work best within individual teams and companies, rather than blindly subscribing to the cult of Agile.

## Gradle Documentation: Gradle Kotlin DSL Primer:

This article provides an overview of the Gradle Kotlin DSL and its features, such as using type-safe accessors, working with containers, handling runtime properties, and interoperability between Kotlin and Groovy languages. The Gradle Kotlin DSL offers an alternative syntax to the traditional Groovy DSL with an enhanced editing experience in supported IDEs, improving content assist, refactoring, documentation, and more.

## Gradle Documentation: Implementing Binary Plugins:

This article discusses the implementation of binary plugins in Gradle builds, focusing on how to apply, configure, and work with them. It provides information on creating plugin IDs, working with files, making plugins configurable using extensions, declaring DSL configuration containers, modeling DSL-like APIs, adding default configuration with conventions, separating capabilities from conventions, reacting to plugins, reacting to build features, using custom dependencies blocks, providing default dependencies, minimizing the use of external libraries, providing multiple variants of a plugin, reporting problems, and aggregating problems.

## Things I learned from teaching:

The author shares their experiences as an instructor teaching an undergraduate class on chess engines. They highlight the challenges they faced, such as balancing curriculum complexity to suit students with varying backgrounds and engaging the students in the first ten minutes of the lecture. They also discuss the importance of office hours for student-teacher interaction and provide tips on improving this aspect of teaching. Overall, the author found the experience rewarding and recommends others to try teaching as well.

## Meshtastic's Opposition to Proposed Changes on 900 MHz Band | Meshtastic:

The Federal Communications Commission (FCC) is considering a proposal from NextNav that could drastically reshape the 900 MHz band, with significant implications for users who rely on unlicensed

spectrum for innovative and community-driven projects. At the heart of the debate lies the potential impact on open-source initiatives like Meshtastic, an open-source decentralized communication platform that operates in the 900 MHz ISM band. This proposal threatens to disrupt the balance by reallocating portions of the 900 MHz band, which could severely impact these unlicensed applications. The potential interference with unlicensed bands, impact on innovation and open-source projects, public safety concerns, and equity and accessibility issues are all reasons why this proposal should be opposed by stakeholders such as amateur radio operators, tech enthusiasts, and public safety advocates.

## **Ozempic Is Changing People's Skin, Say Plastic Surgeons:**

The article discusses the side effects of Ozempic, a drug used for weight loss, on patients' skin quality and facial appearance. Dr. Few found that the skin of people taking GLP-1 drugs like Ozempic resembles an "old, overused rubber band" and loses its elasticity. This can lead to sagging around the jawline and contribute to accelerated aging in the face. The drug's side effects include thinner and weaker SMAS layers (connective tissues supporting the face), which affects facelift results. Dr. Mahmood, a plastic surgeon, has noticed increased laxity in tissue of patients who took GLP-1 drugs for weight loss.

## All of Earth's water in a single sphere!:

This article discusses the relative size of water spheres representing Earth's water in comparison to the size of the Earth. Each sphere represents "volume," highlighting that, while water may appear vast on the surface, it is a small percentage of the planet's volume. The largest sphere represents all of Earth's water, followed by liquid freshwater and water in lakes and rivers. It emphasizes that most of the world's drinkable freshwater is groundwater, much of which is inaccessible to humans. The article concludes by pointing out that Earth's surface-water sources, such as lakes and rivers, provide a significant portion of the fresh water people and life forms need daily.

## Are We Living in the Age of Info-Determinism?:

The internet has created a sense of uncertainty and authority crisis in society by constantly providing new information that can influence public opinions and decisions. Traditional media sources have lost credibility as people seek out alternative sources, such as social media platforms, to get their news. This has led to the fragmentation of mass audiences into smaller communities with shared interests. Leaders' attempts to control the unruly public through media literacy programs and algorithm tweaks have only worsened the situation. The main goal of Martin Gurri's book "The Revolt of the Public" is not to fix this problem but to describe it, while acknowledging that a solution might be difficult to find due to the increasing influence of AI in creating new cultural artifacts.

## Radiacode 102 & 103: Radiation Detector, Gamma Spectrometer and Scintillation Counter:

The Radiacode 102 & 103 are radiation detectors, gamma spectrometers, and scintillation counters that have several features to offer. These include a high-resolution Geiger counter, Gamma

spectroscopy, isotope identification, radiation mapping on Google Maps, monitoring of food activity (Cesium-137), and a spektrum function. The Radiacode 102 & 103 are designed for easy use and efficient operation, making them ideal for personal or professional purposes. They can be used independently or as part of a networked system.

#### The Webb Telescope Further Deepens the Biggest Controversy in Cosmology:

The James Webb Space Telescope has cast doubt on the existence of a cosmic expansion rate problem known as the Hubble tension, according to new measurements from three different teams using its data. While nearly all cosmologists expected the sharp vision of the telescope to bring clarity, it appears that the disagreement over how quickly the universe is expanding remains. The rival teams led by Adam Riess and Wendy Freedman have both measured the cosmic expansion rate, known as the Hubble constant or H0. However, their measurements disagree significantly, suggesting there may be some extra ingredient in the laws of physics that accelerates cosmic expansion.

#### Core Python developer suspended for three months:

The Python Steering Council has suspended core Python developer Tim Peters for three months due to alleged Code of Conduct violations. These included making offensive posts, dismissing unacceptable behavior as a "neurodivergent" trait, and discussing controversial topics excessively. The Council acted upon the recommendations of the Code of Conduct Working Group. Some members of the Python community expressed concern about the secrecy involved in the process, highlighting potential abuse of power.

## Beliebte Fehler - korrekturen.de:

The German spelling system contains several common pitfalls that even skilled writers can struggle with, such as gallopieren or galoppieren, Millenium or Millennium, and Terasse or Terrasse (the second option is correct in each case). This article presents an alphabetical collection of errors that enjoy particular popularity, often being made frequently. In addition to misspellings or incorrect words, the correct spelling/word and a brief explanation are provided. The last 20 errors include Solarpanele, zuverlässlich, eingeschleift, Langerweile, nächstmöglichst, zugrundegehen, and more. Users can browse the alphabetical list by clicking on the desired initial letter or using the search field. For questions or suggestions regarding entries, visit our forum. The most common spelling doubts of the new orthography are found in a comparative listing in our extensive word list.

## Mastering OSINT: How to Find Information on Anyone:

Open Source Intelligence (OSINT) is the collection and analysis of publicly available data to generate actionable intelligence. This article provides a guide to finding information on anyone using OSINT methods, including gathering basic information, analyzing collected data, pivoting with new data, and validating assumptions. It also highlights various tools and techniques such as Google search queries, people search websites, reverse username lookup, email tools, compromised databases, social media search, phone lookup services, geolocation tools, IP-based geolocation, EXIF data analysis, and more.

By mastering OSINT, individuals can unlock a wealth of information from publicly available sources for journalistic, investigative, or personal purposes while respecting privacy and legal boundaries.

## Stratasys sues Bambu Lab over patents used widely by consumer 3D printers:

3D printing company Stratasys has filed a patent lawsuit against consumer-focused startup Bambu Lab, accusing the latter of infringing upon ten patents that it owns through subsidiaries like Makerbot. The patents cover fundamental technologies such as force detection and fused deposition modeling (FDM) used in 3D printers. This lawsuit could have a significant impact on the wider 3D-printing scene. Bambu Lab, which entered the market in 2021, has gained market share due to its fast multicolor printing capabilities but has faced issues with force printing and heat problems in its A1 printer. Stratasys is one of the most established firms in 3D printing since 1988, supplying products for manufacturing and commercial prototyping purposes.

# Google abruptly shuts down AdSense in Russia as tensions with Kremlin escalate:

Google has announced it is shutting down all AdSense accounts in Russia due to ongoing developments in the country. This effectively ends Russian content creators' ability to monetize their posts, including YouTube videos. The change impacts accounts monetizing content through AdSense, AdMob, and Ad Manager, according to Google's support page.

# Faster Docker builds using a remote BuildKit instance:

This article discusses a fork of BuildKit created by Blacksmith, which has found inefficiencies with BuildKit in the cloud, especially when dealing with simultaneous builds. The optimized fork addresses these issues and provides speed improvements for remote Docker builds. Using the new BuildKit fork can save on costs compared to more expensive cloud alternatives such as EC2.

## Image-building best practices:

The article discusses the docker image history command and its usage in viewing layers within an image. It explains that each line in the output represents a layer, with newest at the top and base at the bottom. The article highlights that changing a layer requires recreating downstream layers and recommends restructuring Dockerfiles to support caching of dependencies. Finally, it introduces multi-stage builds for separating build-time and runtime dependencies, reducing image size, and speeding up build times.

## The Geometric Tool That Solved Einstein's Relativity Problem:

Tensors are mathematical objects used in various fields such as math and science to reveal hidden geometric truths. They were instrumental in Einstein's general theory of relativity, machine learning, quantum mechanics, and even biology. Tensors can be represented by arrays of numbers but have a

deeper geometric meaning. In physics and mathematics, tensors enable the manipulation of properties that remain constant despite changes in coordinate systems, such as distance or time. Since Einstein's discovery, tensors have become essential for understanding and describing complex phenomena in various scientific fields.

#### Xplora | Smartwatch für Kinder:

The article discusses a platform that allows children to track their activity and earn rewards for each step taken with the Xplora Smartwatch. Parents can monitor their child's progress through an app, encouraging them to stay active. For every 1000 steps, children earn a coin which can be exchanged for age-appropriate learning content or cool prizes. The platform also enables users to register for fun adventures using the Xplora app, while the smartwatch itself doesn't display activity information.

#### Upsert in SQL: What is an upsert, and when should you use one?:

Upsert is a database operation that updates an existing row if a specified value already exists in a table and inserts a new row if it doesn't. Different RDBMS handle upserts differently, with some not even providing a dedicated command for it. MySQL has the "INSERT ... ON DUPLICATE KEY UPDATE" command, PostgreSQL uses the "INSERT ON CONFLICT", and CockroachDB provides an UPSERT command. Upserts can be helpful when dealing with databases and updating or inserting data depending on existing values.

#### bbum's rants, code & references:

The origin of the magic numbers 0xCAFEBABE and 0xFEEDFACE in mach-o file formats has been a topic of discussion among ex-NeXT users. It was suggested that Java chose to use 0xCAFEBABE as a .class file magic number due to an ex-NeXT employee's influence. In reality, the numbers are not architecture specific and denote mach-o files. The story behind their choice is attributed to James Gosling, who named them after a local legend about the Grateful Dead and a coffee place called St Michael's Alley.

#### The Goths:

This article discusses the history and revival of the Gothic aesthetic, from its origins in literature, such as Horace Walpole's 1764 novel The Castle of Otranto, to its influence on post-punk music like Bauhaus' "Bela Lugosi's Dead." It also explores the connection between Gothic and Germanic culture, from the Gothic translation of the New Testament by St. Ulfilas in the 4th century AD to the continued fascination with Gothic elements in modern times. The article highlights how various artistic movements have been influenced by Gothic sensibilities and points out that even though it may seem like a revival, these Gothic elements are part of a much broader European cultural tradition.

#### Gradle Documentation: Configuring Tasks Lazily:

This article discusses the use of lazy properties in Gradle to manage complex build configurations. It provides examples of different types of lazy properties, demonstrates how to connect them together, and highlights their benefits in terms of deferred value resolution, automatic task dependency management, and improved build performance. The article also covers how to work with collections and maps using lazy properties, and the various locations where conventions can be applied.

#### Damn Vulnerable UEFI (DVUEFI):

Damn Vulnerable UEFI (DVUEFI) is a toolkit and learning platform that helps ethical hackers, security researchers, and firmware enthusiasts explore UEFI firmware security and vulnerabilities. It was inspired by projects like Damn Vulnerable Web Application and OWASP's Damn Vulnerable Web Sockets. The project features a continuously evolving catalog of UEFI vulnerabilities, and is designed to be deployable on both Windows and Linux. DVUEFI aims to assist in practicing and refining exploitation techniques in a simulated real-world environment.

#### **Distributed == Relational**:

The article discusses distributed systems in the context of FREST architecture design. It highlights how maximally efficient solutions can be achieved through parallel sequential operations by allowing A to send messages to B and C, which can execute simultaneously. FREST is naturally expressed as a set of relational stores with triggers and allows API clients to create endpoints for their own purposes. By adopting this paradigm, interesting possibilities arise from supporting functional programming operations and reactive user interfaces in software development.

## Piecing Together an Ancient Epic Was Slow Work. Until A.I. Got Involved.:

Scholars have been attempting to reconstruct the ancient Epic of Gilgamesh since its discovery in 1872 by George Smith, who recognized it as a prototype of the biblical flood story. The epic, written over 3,000 years ago and based on even older works, has remained incomplete due to the scarcity of experts in cuneiform, the script used in ancient Mesopotamia. Smith dedicated his life to locating fragments of the poem but died at age 36 before completing his quest. Since then, successive generations of Assyriologists have continued searching for missing pieces of the epic, which remains incomplete with about 30% of it still missing.

## Stop Relying on IF NOT EXISTS for Concurrent Index Creation in PostgreSQL:

The article discusses issues that can arise when creating indexes in PostgreSQL concurrently and how using the IF NOT EXISTS clause as a quick fix can lead to subtle, hard-to-debug problems in production environments. Instead, it suggests a safer approach of dropping any existing index (valid or invalid) and then recreating it. This method attempts to create the index, tries to remove any existing index if it fails due to a lock timeout, and retries the index creation with exponential backoff.

#### Working from home allowed him to be a more engaged dad. Now it's over:

This article discusses the increasing strictness of return-to-office policies, impacting employees who had grown accustomed to working from home. Employers argue that a full return to the office promotes stronger social connections and better collaboration in the workplace. In Philadelphia, city workers have been ordered back to the office five days a week. Andrew DiDonato, a construction plan review specialist with the Department of Licenses and Inspections, had enjoyed a hybrid schedule before returning to full-time in-person work. The impact on his family's balanced life has led him to question whether the benefits of his job are worth the sacrificed family time.

## Cancer Rates Are Rising in Young People. Here's What You Need to Know:

Cancer incidence and mortality are rising among millennials and even younger populations, while rates among older Americans are declining, according to American Cancer Society (ACS) data. People in the under-50 group experienced an overall increase in cancer incidence from 1995 through 2020. One reason for the rise could be insufficient screening and awareness of early detection methods among younger individuals. There is a need to raise awareness, discuss personal risk factors, and improve accessibility to healthcare services for young people. Prevention measures such as maintaining a healthy diet and lifestyle can help reduce the risk of cancer.

## **Keeping Secrets**:

In 1977, a Stanford professor and his graduate students faced opposition from the National Security Agency (NSA) when their research on computer privacy issues threatened to reveal government secrets about cryptography. The NSA had previously maintained control over knowledge of how to encrypt and decrypt information. As society's reliance on computers grew, it became increasingly important for private sector businesses to secure their data as well. This conflict highlighted the ongoing tension between privacy-conscious technologists and security-conscious government officials in balancing security and privacy concerns. The Stanford professor, Martin Hellman, argued that advances in cryptography were essential for a growing computerized economy.

## Software Security: Entwickler ertrinken in technischen Schulden:

The State of Software Security (SOSS) report, published by security firm Veracode, examines the prevalence of security vulnerabilities in software and describes the accumulation of "security debt" when companies do not address issues over time. Over 70% of organizations suffer from security problems in their software, with many deemed critical. The causes of these issues are not as straightforward as some may think, according to the study. In addition to external libraries, enterprise-owned applications also face challenges, with 63.4% of them affected by flaws within development teams. Technical debt, or security debt, accumulates over a software's lifecycle when dealing with these security-related issues. The report identifies that developers often prioritize functional requirements over security requirements, resulting in unaddressed vulnerabilities. Larger and older applications tend to accumulate more security flaws due to increasing complexity of codebases and the number of dependencies over time. Insufficient training or lack of knowledge about secure programming practices, as well as insufficient continuous security checks throughout the development lifecycle, lead to slower issue resolution. The report recommends focusing on the

top three critical issues to prioritize security improvements. Common weaknesses enumeration (CWE) and the OWASP Top-10 are used to identify common vulnerabilities. External libraries play an increasingly important role in assessing software security, with more than half of applications collecting dozens to hundreds of external dependencies over their lifetime.

#### **OpenAl und Microsoft: Der Tragödie zweiter Teil:**

This article discusses the ongoing drama surrounding OpenAI, Microsoft's involvement with and investment in the company, Apple's partnership with OpenAI, and the potential for KI to impact various aspects of society. It highlights concerns about the influence of major tech companies like Microsoft, Apple, Google, Amazon, and Meta on AI development, ethical issues, and the need for unbiased oversight. The article concludes by emphasizing the importance of education, awareness, and regulation to ensure responsible use of KI technologies.

# **Opinion** | The Science That Put This Man on Death Row Has Been Debunked. He's Going to Be Executed Anyway.:

The article discusses the ongoing debate around the death penalty in the United States, particularly focusing on Charles Don Flores, who has been on death row in Texas since 1999 and is awaiting execution for a murder he maintains he did not commit. The editorial board of the publication argues that the death penalty is full of bias and error, morally abhorrent, and futile in deterring crime. With the Death Penalty Information Center highlighting society's greater understanding of the fallibility of the legal system, more states have rejected capital punishment over the past three decades. Twenty-nine states have either abolished or paused executions by executive action. A Gallup poll found that more Americans believe the death penalty is administered unfairly than fairly, and support for the death penalty has steadily declined since the mid-1990s.

# Apple says Patreon must switch to its billing system or risk removal from App Store | TechCrunch:

Apple has threatened to remove crowdfunding app Patreon from the App Store if creators continue using unsupported third-party billing options or disable transactions on iOS. Patreon is now undergoing a 16-month-long migration process to move all creators to Apple's subscription billing by November 2025, while also providing creators with options to switch over to subscription billing as of November 2024. This announcement highlights Apple's App Store rules being applied unevenly and continues the company's ongoing conflict with Epic Games over antitrust issues.

## Alcohol Researcher Says Alcohol-Industry Lobbyists are Attacking His Work:

The article discusses a study co-authored by epidemiologist Tim Stockwell, which concluded that no amount of alcohol improves health, contradicting previously established theories like the J-curve. The study has faced criticism, with some accusing Stockwell of cherry-picking evidence, while Stockwell counters these accusations by accusing his detractors of being funded by the alcohol lobby. The article highlights that Stockwell's research has been published in reputable scientific journals and that

he collaborated with scientists in positions of power at major institutions, such as the World Health Organisation.

## Alibaba Cloud claims K8s service meshes are resource hogs:

Alibaba Cloud has introduced Canal Mesh, its home-grown service mesh for Kubernetes, which it claims significantly outperforms Google's Istio and other rival tools. The company presented the new technology at the Association for Computing Machinery SIGCOMM conference in Sydney, Australia. Alibaba Cloud's paper claimed Canal Mesh offered throughput 12.3x and 2.3x higher than Istio and Ambient with latency 1.7x and 1.3x lower; CPU consumption  $12x \sim 19x$  and  $4.6x \sim 7.2x$  lower than Istio and Ambient; configuration completion time for creating hundreds of pods was  $1.5x \sim 2.1x$  and  $1.2x \sim 1.5x$  smaller than Istio and Ambient, with southbound bandwidth occupation being 9.8x and 4.6x lower than Istio and Ambient. However, Alibaba Cloud has not yet released code for others to peruse or implement.

## **GIL Become Optional in Python 3.13**:

GIL (Global Interpreter Lock) can be disabled in Python version 3.13, which is currently an experimental feature. GIL is a mechanism used by the CPython interpreter to ensure that only one thread executes the Python bytecode at a time. The free-threaded mode in Python 3.13 allows threads to run more concurrently, but it's still in its experimental phase and can be enabled during installation. If you want to try it, you can download the beta version of Python 3.13 from their official website.

# Gradle Documentation:

The article discusses how to extend the Gradle DSL using an extension object, allowing developers to add custom properties and blocks for plugins. An example is provided with a build script that creates three environments with their respective URLs. The ServerEnvironment class is introduced as an immutable object containing a name and URL property. Gradle's

ObjectFactory.domainObjectContainer method is used to create a container of data objects, which are then exposed by the extension container. In the example, a plugin post-processes captured values within the plugin implementation, creating a deployment task for each environment. Developers can find more information on implementing project extensions in Developing Custom Gradle Types.

## Structured Streaming | Databricks:

This article introduces Structured Streaming, an Apache Spark model for handling streaming datasets in large-scale, real-time stream processing scenarios. It provides an overview of the model and its similarities to batch processing, as well as different output modes (Complete Mode, Append Mode, Update Mode) available for configuring the external storage output. The tutorial also covers how to load sample data, initialize a stream, start a streaming job, and query a streaming dataset using Apache Spark.

## Upsert into a Delta Lake table using merge - Azure Databricks:

The MERGE SQL operation in Delta Lake supports upserting data from a source table, view, or DataFrame into a target Delta table. It supports inserts, updates, and deletes, with extended syntax beyond the standard SQL for advanced use cases. Upserts can be done by merging new data with existing records, updating matching rows, inserting unmatched rows, and deleting unmatched rows in the target table. Delta Lake's merge operation semantics include whenMatched clauses for update and delete actions and whenNotMatched clauses for insert actions, as well as optional conditions for each clause. The merge operation can fail if multiple source records match a single target record, resulting in ambiguity over which source row should be used to update the matched target row.

#### KnitScape:

KnitScape is a browser-based tool that enables the design and simulation of stitch patterns for knitting. The tool allows users to specify operation repeats, color changes, and needle positions. It uses these inputs to build a graph of yarn topology and run a yarn-level spring simulation. This visualization helps users explore complex colorwork designs more efficiently. A series of example swatches demonstrates the effectiveness of KnitScape in designing slip and tuck colorwork patterns.

## How to avoid losing items? Holding pens.:

The article discusses why people lose things inside their homes and suggests an ideal solution to prevent such occurrences. It explains how having assigned places for each item can help reduce the chances of losing them. However, there are instances when items may not have permanent locations or when people don't have enough time to put them in their assigned spots. To address this issue, the article introduces holding pens as a solution. Holding pens are trays placed in every room, designed to hold transient and unimportant items. They prevent these items from becoming clutter and ensure that they are always stored in designated areas. Regular cleaning of holding pens helps maintain their purpose and prevents them from becoming storage areas.

#### The Sarumans and The Radagasts:

The article discusses two archetypes of deep magic that influence how things happen in the world: Sarumans and Radagasts. These are based on characters from "Lord of the Rings" but serve as metaphors for different approaches to power and change.

Sarumans represent a bold, self-interested approach to making changes in the world. They believe in the Great Man theory of history, which posits that progress is driven by individual heroes. Successful Sarumans can create significant impact but often do so in a way that's perceived as being ruthless or autocratic.

On the other hand, Radagasts are more compassionate and system-oriented. They believe in the potential of everyone around them and seek to nurture greatness in others. Their magic is indirect and diffuse, creating value through systems thinking and fostering environments where people can

thrive.

The article also explores how these two archetypes interact and evolve over time, noting that most people start with Saruman-like qualities but may later develop Radagast-like traits after facing a crisis or hitting a wall in their current approach. The ideal is to balance both types of magic within oneself or within a team for the most effective change-making abilities.

## Attention Required! | Cloudflare:

This article discusses a security block on a website by Cloudflare, which protects against online attacks. The user has been blocked due to a certain action performed that triggered the security solution. To resolve the issue, the user can contact the site owner and provide details of the event that led to the block, as well as the Cloudflare Ray ID found at the bottom of the page.

## A Writing Exercise to Help You Meet Yourself (Video):

The video discusses two different philosophies of writing: the usual approach focused on coherence, polished language, and correcting words, and automatic writing as an alternative technique. Automatic writing encourages expressing genuine thoughts by writing continuously without thinking too much or agonizing over every word. This method is used to address emotional topics and reveal feelings that are at odds with the writer's usual self-perception. The video suggests that practicing automatic writing can help individuals become more aware of their true selves, as well as release emotions they may have been suppressing due to societal expectations or fear of hurting others.

# Ukrainischer Angriff gegen Russland analysiert [] [] Alle News vom 13.08.2024 (Video):

Die Kämpfe zwischen russischem und ukrainischen Militär in der Grenzregion Kursk setzen sich fort, nachdem Moskau Luftangriffe durchgeführt hat, um die Vormarsch der Ukrainer vorerst zu stoppen. Der russische Generalmajor Aladunov gibt an, dass der Feind weiß, dass sein geplanter Blitzkrieg nicht funktioniert habe. Die ukrainischen Streitkräfte melden verstärkte russische Angriffe im Osten des Landes, im Oblast Donetsk. Experten für Sicherheitspolitik wie Fabian Hoffmann argumentieren, dass die Ukraine mit ihrem Vorstoß in der russischen Region Kursk substanzielle Landgewinne erzielen möchte und sich eventuell auf unbestimmte Zeit in Russland einrichten könnte.

Die Ukraine könnte langfristig einen kleinen Teil von Russland besetzen, was jedoch politisch und militärisch nicht gewünscht ist. Die ukrainische Offensive beeinflusst die Diplomatie zwischen beiden Seiten, und es besteht der Drang nach einer Verhandlungslösung, die den aktuellen Frontverlauf respektiert. Die Ukraine hat es geschafft, sich in eine bessere Verhandlungsposition zu bringen, während Russland weiterhin auf seine Maximalforderungen bestehen bleibt und vorerst keine ernsthafte Verhandlungen eingeht.

Der US-Präsidentschaftskandidat Donald Trump und Tech-Milliardär Elon Musk führten ein Gespräch auf der Plattform von Twitter, wo sie radikale und falsche Theorien verbreiteten. Experten sehen Trumps Rückkehr als Zeichen von Schwäche und kritisieren, wie Musk die Situation nutzt, um seine eigene Agenda voranzutreiben. Die Debatte über die Grenzen der USA und illegale Einwanderung sowie der Versuch, das Gespräch als Teil einer größeren Verschwörungserzählung darzustellen, wird fortgesetzt.

## **Snowflake vs Databricks - And the Battle For Iceberg (Video):**

The transcript discusses the potential of building a single data layer for large enterprises using Iceberg, considering its acquisition by Snowflake. Key points include:

1. The benefits of having a standardized data storage system across organizations, like Facebook's data mesh approach.

2. Challenges faced in implementing a single data layer due to politics, regulations, shadow data teams, and the desire for instant gratification through siloed data warehouses or data lakes.

3. The importance of coordinating the definition of core business entities and overcoming shadow data team issues.

4. The potential role of Iceberg as a transaction layer for applications, with Snowflake or Databricks on top, to reduce data duplication.

5. The need to consider data security when building a single layer of data.

6. Alternative solutions, such as using SQL Server as a data warehouse.

7. The importance of finding a middle ground between ease-of-use and security in data management tools.

## **Creating Low Latency Voice Agents - Open Source** [][] (Video):

The YouTube video transcript discusses the topic of creating a voice assistant using existing tools and APIs for speech-to-text conversion, language models, and text-to-speech capabilities. The speaker showcases a project called Verbi, which is a modular voice assistant application that allows users to switch between different models for transcription, LLMs, and text-to-speech using various API providers like OpenAI, Grok, DeepGround, Cartesia, etc. The video also covers the process of setting up different models like LLM, transcription, and text-to-speech, as well as running them locally. The speaker highlights that the project's goal is to generate a system with minimal latency using different tools available in the market. In conclusion, the video introduces Verbi and explains how it can be used as a modular voice assistant application for experimenting with various transcription, LLMs, and text-to-speech models.

# Die Geschichte der Grenze zu Mexiko ist viel komplexer als allgemein bekannt [] Mapped Out (Video):

The video discusses the history of the US-Mexico border and its security measures, focusing on the construction of various fences and walls along the border. It highlights that both Republicans and Democrats have contributed to building these barriers throughout history, often by simply adding onto or replacing existing structures.

Key points include: 1. The US-Mexico border has evolved over time, with its current appearance influenced by policies and security concerns.

2. Border barriers, such as fences and walls, have become a political tool for politicians to demonstrate their efforts in addressing issues related to illegal immigration.

3. These barriers often do not effectively address the root causes of migration, which include poverty, violence, and other socio-economic factors.

4. The video also explores the history behind the construction of these barriers, from President Ronald Reagan's amnesty policy for undocumented immigrants to the North American Free Trade Agreement (NAFTA) between the US, Canada, and Mexico.

5. Despite numerous efforts by presidents from both parties to address illegal immigration and border security, a comprehensive reform of immigration policies has remained elusive.

6. The video concludes that the history of border barriers is far from over, and whoever wins the next presidential election will likely continue building them.

## Das Verschwinden der Amalfi-Zitronen 🛛 Fokus Europa (Video):

The Amalfi Coast is famous for its stunning landscapes and the production of citrus fruits. Francesco Bonocore is one such farmer who grows citrus trees in his orchard, which he inherited from his grandfather. However, this season, their dream has turned into a nightmare due to the spreading of a harmful fungus known as Malseco. This fungus dries out the citrus trees from within and causes them to wither. Farmers like Francesco have lost a significant portion of their harvest, and the Amalfi Coast's citrus production has been severely affected. The disease is spreading rapidly due to changing climatic conditions, and if it continues unchecked, the entire region will lose its citrus industry. This would be a major blow not only for agriculture but also for tourism as citrus scent is an integral part of Amalfi's identity. The Italian government has promised assistance measures for the affected farmers, and Francesco hopes to continue till the next harvest season with their help.

## Was Krisen mit uns machen (Video):

The Transcript eines Youtube Videos discusses various topics related to mental health issues, particularly focusing on depression. Key points include:

1. Increasing numbers of diagnosed depressions worldwide and Germany.

2. Factors contributing to increased depression diagnoses - Genetic predisposition, stressful life events such as crises, wars, climate change, social media usage, and poor lifestyle choices including diet, lack of exercise, and insufficient sunlight.

3. The role of social media in mental health: Multiple meta-analyses suggest a significant correlation between increased social media use and depression.

4. The Stanford University of Medicine has conducted studies on genetic factors contributing to depression - its heritability is estimated at 40-50%, indicating that both genetics and external factors contribute to the development of depression.

5. Stigmatization of mental illness: Though there's still a stigma, it has decreased over time. A study showed that between 1996 and 2018, stigma towards mental health issues in the US had reduced.

6. The importance of early detection and treatment of depression to improve overall well-being and reduce stigma.

7. Seeking professional help and taking appropriate measures such as insurance coverage is crucial for mental health management.

## Only 1 Person in the World Can Hear this Speaker (Video):

The Oddfly Model B is a directional speaker that uses ultrasonic audio waves to create a private listening zone for the user, similar to a headphone experience. These speakers are designed to be used in digital signage and advertising applications but also showcase creative uses such as integrating them into playground haunted houses or even building DIY versions like a gun. The speaker's unique directional properties make it difficult for other people nearby to hear what is being played, while the ultrasonic waves can be blocked easily by objects in their path.

# Die CO2-Lüge-Was die Kompensationsgeschäfte wirklich für das Klima bringen [] Doku HD Reupload [] ARTE (Video):

The Transcript eines Youtube Videos discusses the issue of carbon compensation and its effectiveness in mitigating climate change. The video explores various topics related to this issue, including the role of large corporations, the impact of compensation projects on local communities, and the overall effectiveness of carbon offsetting.

1. Introduction: The video begins by introducing the concept of carbon compensation or offsetting, where individuals or companies can pay to reduce their carbon footprint through external projects. It notes that this has become a multi-billion dollar industry but questions whether it lives up to its promises.

2. Carbon Compensation Projects: The video highlights several examples of carbon compensation projects around the world, including a forest protection project in Honduras supported by L'Oréal and a water purification project in Bangladesh funded by the discounter Hofer. These projects aim to reduce CO2 emissions through methods such as reforestation or providing clean drinking water.

3. L'Oréal's Mangrove Protection Project: The video focuses on L'Oréal's involvement in a mangrove protection project in Honduras, which aims to offset the company's carbon emissions by protecting and expanding these ecosystems. However, the effectiveness of this project is questioned due to issues with monitoring, funding, and local community engagement.

4. Hofer's Water Desinfection Project: The video also examines a water desinfection project in Bangladesh funded by the discounter Hofer. This project aims to reduce CO2 emissions by providing solar-powered water purifiers to rural communities. Despite initial enthusiasm, the project is found to have limited impact due to issues with implementation and sustainability.

5. Challenges of Carbon Compensation: The video discusses several challenges associated with carbon compensation projects, including difficulties in accurately measuring their effectiveness,

6. Regulation and Oversight: The video calls for increased regulation and oversight of carbon compensation projects to ensure transparency and accountability. It suggests that standards should be set by national certification bodies like TÜV, and that international mechanisms such as the United Nations' Loss and Damage Fund could play a role in compensating communities most affected by climate change.

7. Impact on Local Communities: The video emphasizes the importance of considering the impact of carbon compensation projects on local communities. It highlights how these projects can lead to displacement, loss of traditional livelihoods, and exploitation if not properly managed.

8. Climate Change Impacts: The video includes a segment at the Sonnenblick observatory in Austria, where scientists discuss the impacts of climate change on high-altitude ecosystems. They note that rising CO2 levels are leading to increased temperatures and melting glaciers, with potentially far-reaching consequences.

9. Conclusion: The video concludes by emphasizing the need for a more comprehensive approach to addressing climate change, which includes reducing emissions at their source rather than relying on carbon compensation projects. It also calls for greater regulation of the private carbon offset market and increased funding for loss and damage mechanisms.

Executive Summary: The Transcript eines Youtube Videos explores the issue of carbon compensation and its effectiveness in mitigating climate change. While such projects aim to reduce CO2 emissions through various methods, they often face challenges related to monitoring, sustainability, and local community engagement. The video calls for increased regulation and oversight of these projects, as well as a shift towards reducing emissions at their source. It also emphasizes the need for greater support for communities most affected by climate change.

# BMW SaaS model; Suspension-as-a-service. It's time to start pirating cars. (Video):

The main topics of this YouTube video are:

1. BMW's heated seats issue: The host discusses the controversy regarding BMW charging customers for access to features they already paid for, such as seat warmers. He argues that manufacturers should not benefit from cost savings without passing those savings on to consumers.

2. Adaptive suspension as a service: The host discusses how BMW's optional adaptive suspension is actually standard but behind a paywall, meaning customers have to pay extra for the software to unlock its use in their cars. This practice of "suspension as a service" is criticized, and the host compares it to app stores where companies charge users for features that were already included in the price of the device.

Executive summary: In this video, the host addresses BMW's controversial practices of charging customers for access to features they have already paid for, such as heated seats and adaptive suspension systems. The host argues that manufacturers should not benefit from cost savings without passing those savings on to consumers and criticizes the practice of "suspension as a service."

#### How to create your own Flux AI Model [] (Flux LoRA Fine Tuning) [] (Video):

The transcript describes a tutorial on how to create an AI model using LoRa for unlimited image generation at a low cost. The video covers three main topics: dataset creation, fine-tuning the model, and final inference. The key points include creating a diverse range of images, captioning images with descriptions, training the model on replicate.ai, storing it in hugging face's model hub, using the model in different interfaces like Google Colab or local machines, adjusting the prompt for better results, and generating custom headshots and text-based images. The tutorial highlights that by paying only for compute time, users can create their own AI models and use them at a fraction of the cost charged by professional services.

## **De-Google Your Life - Part 2** Ad-Free YouTube! (Video):

The video discusses de-Googling your life by providing alternatives to Google services such as password management, cloud storage, maps, ad management, and YouTube. Key points include:

1. Non-Google password managers like KeePass or Bitwarden can lower the risk of account hijacking, while 1Password offers extra security with random secret codes and two-factor authentication support.

2. Proton's password manager is a privacy-focused alternative that gained the ability to lock the vault with a different password from the account password.

3. Authy and Entay Auth are recommended for two-factor authentication (2FA) apps, while Google Authenticator can be replaced by exporting your codes as QR codes.

4. Alternatives to Google Maps include OpenStreetMap, Magic Earth, OsmAnd, and DuckDuckGo or Kagi which use Apple Maps for navigation purposes.

5. Dropbox, iCloud Drive, OneDrive, and Cryptomator offer encrypted storage alternatives, while Proton Drive has a secondary password feature to prevent unauthorized access to stored data.

6. OwnCloud and NextCloud are open-source cloud services that provide more control than Google Drive, but require forwarding ports or using remote network access apps like Tailscale.

7. Trezorit is a Swiss post service with strong privacy features and compatibility with various platforms and operating systems.

8. DNS services such as Piehole allow users to run their own filters at home, while Brave's built-in Shields feature blocks ads on supported websites.

9. UBlock Origin is suggested for ad blocking across multiple browsers, while AdGuard can block ads and provide custom filters in Safari.

10. FreeTube, LeverTube, Yati, GreyJ, and NewPipe are alternatives to YouTube that do not display ads or trackers and allow users to import subscriptions from Google Takeout.

11. NVIDIUS is a platform for running YouTube without ads, while Tor or virtual private networks (VPN) can hide your IP address when connecting to servers you don't own.

## Venezuela is the Most Mismanaged Economy in the World (Video):

The transcript of the YouTube video discusses the economic mismanagement of Venezuela, focusing on how its vast oil reserves have not translated to economic prosperity. Venezuela is home to the largest oil reserves in the world but has lost over 80% of its GDP in less than a decade due to poor management and corruption. The video highlights that Norway, which also has government-owned oil industries, serves as a gold standard for managing oil wealth by using its oil revenues to generate long-lasting wealth through the establishment of the largest sovereign wealth fund in the world. Venezuela's main issues stem from internal factors, such as corruption and mismanagement, rather than external forces like sanctions from other countries. The video concludes that Venezuela is currently facing one of the worst economic collapses in history with no clear game plan to turn its economy around.

## The Bingo Paradox 3× more likely to win (Video):

This video is about the mathematics behind bingo, specifically focusing on horizontal versus vertical winning patterns. The presenter, Matt Parker, discusses the probabilities of different types of matches occurring, such as horizontal wins and vertical wins, and how the number of balls drawn from a pool affects those probabilities. He also mentions the concept of "bingo paradox," which states that horizontal wins are three times more likely than vertical ones, and provides calculations to support this claim. The video concludes by discussing an exclusive bingo set designed by artist Paul Catherall based on geometric shapes from a 1960s book by Sid Sidders.

# Nord-Stream-Anschlag[] Wie deutsche Ermittler dem Hauptverdächtigen auf die Spur kamen [] Kontraste (Video):

The transcript discusses the ongoing investigation into the Nord Stream pipeline attacks, which occurred in September 2022. The primary suspect is Volodymyr Z., a Ukrainian professional diver and former military officer. German prosecutors believe he is likely responsible for the attack but have been unable to apprehend him due to his current whereabouts being unknown. Z. is married with children, and has worked as a diving instructor at a dive school in Kiev.

The transcript also mentions two other individuals who are under suspicion: Svidlana U., the owner of the dive school where Z. was an instructor, and her husband Yevgen U., a TEC Deep Diver with specialized training for dives beyond 40 meters in depth. Both deny any involvement in the attack but are being investigated by German authorities.

The Wall Street Journal has reported that the idea to carry out the sabotage was conceived during an alcohol-fueled meeting in Ukraine in May 2022 and financed by Ukrainian businessmen under the supervision of a general. The attack is said to have cost around \$300,000. According to the report, President Zelenskyy approved the plan shortly afterward, with Army Chief Saluzhny being informed as well. However, the Dutch military intelligence agency learned about the plot and warned Germany and the United States. The CIA then urged Ukraine to abandon the plan, but it is alleged that a high-ranking general defied Zelenskyy's orders and carried out the attack anyway.

In summary, this transcript covers the ongoing investigation into the Nord Stream pipeline attacks,

focusing on the main suspect Volodymyr Z., as well as other individuals under suspicion for their potential involvement in the incident. The discussion also highlights reports of a Ukrainian origin for the attack plan and its alleged approval by President Zelenskyy before it was ultimately carried out.

## Warum Politiker jetzt Halbleiterwerke in Europa bauen möchten 🛛 DW Business (Video):

The video discusses the symbolic groundbreaking ceremony for one of the largest investments in Eastern Germany, which marks TSMC's significant investment in the region. TSMC-CEO CCY from Taiwan attended, along with German Chancellor Olaf Scholz and EU Commission President Ursula von der Leyen. The chip factory is expected to cost over 10 billion euros by 2027 and will be supported by the European Chips Act, aiming for a more independent supply chain in Europe from global disruptions, trade disputes, piracy, etc. TSMC will own 70% of the company, while partners Bosch, Infineon, and NXP from Germany and the Netherlands will hold 10%. The video emphasizes the importance of collaboration in such a large project due to its high costs and the need for complementary skills among various participants. TSMC is working closely with Technical University Dresden, hosting internships and offering job opportunities for students. The new factory in Dresden is part of TSMC's strategy to diversify away from Taiwan and establish plants in Japan, Arizona, and Germany.

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