

# Links für 2024 KW 31

Zusammengefasst von [LlongOrca](#).

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## **Reddit CEO says Microsoft needs to pay to search the site:**

Reddit CEO Steve Huffman has called on Microsoft and other companies to pay if they want to continue scraping data from the platform. Huffman specifically named Microsoft, Anthropic, and Perplexity for refusing to negotiate. He stated that Microsoft has been using Reddit's data to train its AI without permission. In response, Microsoft said it „honors the directions provided by websites that do not want content on their pages to be used with our generative AI models.“ By calling for licensing deals, Reddit joins traditional media publishers in seeking payment for letting their content feed generative AI systems.

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## **80% of developers are unhappy. The problem is not AI, nor is coding - ShiftMag:**

The Stack Overflow survey revealed that most developers are unhappy with their jobs, with plumbers and farmers reporting higher levels of happiness. The annual Developer Survey focused on AI usage and workplace satisfaction, revealing that 72% of respondents support the use of AI tools. However, there has been a decrease in satisfaction compared to last year, with developers being more disappointed with results achieved using these tools. Despite this, 76% of all respondents use or plan to use AI tools in their work, primarily for increased productivity. Developers are divided on trusting AI solutions, but most don't see it as a threat to their jobs. The Workplace Satisfaction Survey found that 80% of professional programmers are unhappy, with 79% concerned about misinformation and misguided tasks caused by AI tools. Factors contributing to developer dissatisfaction include decreasing salaries for software engineers, technical debt, pressure to meet deadlines, bureaucracy, and uncertainty due to recent layoffs.

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## **With CO2 Levels Rising, World's Drylands Are Turning Green:**

Southeast Australia and other drylands around the world, such as Africa's Sahel, western India, northern China, and southern Africa, have been experiencing increasing growth despite aridity. The primary cause is believed to be a 50% rise in carbon dioxide concentrations in the atmosphere since preindustrial times, driving climate change while also fast-tracking photosynthesis in plants. This allows them to use scarce water more efficiently and fertilizes vegetation growth even in dry places. In most arid lands, this CO2 effect is proving stronger than anticipated, leading to unexpected greening across many ecosystems. However, while some argue that the greening may have negative impacts for both ecosystems and human populations relying on them, it does help to slow down climate change by moderating the buildup of carbon in the atmosphere.

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## **Impact of Plant-Based Dietary Fibers on Metabolic Homeostasis in High-Fat Diet Mice via Alterations in the Gut Microbiota and Metabolites:**

Based on the article, the consumption of plant-based dietary fibers, such as  $\beta$ -glucan, pectin, wheat dextrin, and resistant starch, can positively affect metabolic homeostasis in high-fat diet mice through alterations in the gut microbiota and metabolites. However, the specific dietary fibers may have different effects on the metabolic homeostasis. For example,  $\beta$ -glucan consumption has been found to be the most beneficial for reducing body weight, adiposity, glucose intolerance, and increasing energy expenditure. Additionally,  $\beta$ -glucan supplementation also impacts the bile acid composition by increasing the concentrations of unconjugated and decreasing conjugated bile acids in the small intestine.

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### **Our data isn't safe. Resist giving it up whenever you can.:**

This article discusses the ongoing battle against cybercriminals and data breaches, highlighting the AT&T data breach where hackers obtained call and text records for almost 110 million accounts. The article also mentions that there were 3,205 data compromises last year involving over 353 million victims in the US, a record high and a 78% increase over 2022. The author shares their personal experiences with protecting their data and encourages others to push back against unnecessary information requests from companies. The article emphasizes that data protection continues to be an ongoing struggle and that every act of defiance is worth celebrating, even if it's not always futile.

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### **Why I prefer rST to markdown:**

This article discusses the benefits and use cases of reStructured Text (rst) as compared to Markdown, particularly for large-scale documentation projects. The author explains that rst is a midweight representation of an abstract documentation tree, which allows for more flexibility in extension and transformation during rendering. The article also highlights some challenges with Markdown syntax, such as its limited support for pre-render transforms and lack of uniform extension syntax. It encourages readers to explore alternative document builders if they find one that suits their needs, emphasizing that there are many powerful documentation generators available beyond simple markdown-based tools.

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### **The consequences of generative AI for online knowledge communities - Scientific Reports:**

This article highlights the impact of generative artificial intelligence (AI) technologies, particularly large language models (LLMs), on information acquisition and content production in various domains. The study focuses on ChatGPT and its influence on user activity in online knowledge communities like Stack Overflow and Reddit developer communities between October 2021 and March 2023. The findings indicate that ChatGPT's release led to a decline in web traffic to Stack Overflow, as well as a decrease in question volumes, particularly in topics where the LLM excels. Meanwhile, Reddit developer communities did not show evidence of decline, suggesting the importance of social fabric as a buffer against community-degrading effects of LLMs. The decline in participation on Stack Overflow was found to be concentrated among newer users, indicating that junior and less socially embedded users were more likely to exit. The study also emphasizes the role of LLMs in shaping the future of knowledge sharing and collaboration online, highlighting the need for approaches and strategies to encourage a sustainable knowledge-sharing dynamic between human users and AI technologies.

## **Oil companies sold the public on a fake climate solution – and swindled taxpayers out of billions:**

This article discusses the findings from a nearly three-year investigation into the fossil fuel industry's role in climate disinformation, which was conducted by Democrats in the House and Senate. The investigators concluded that major oil companies had misled the public on climate change for decades and were continuing to do so about their preferred „climate solutions“ such as biofuels and carbon capture. Companies touted the potential of carbon capture publicly while downplaying it internally. Exxon's low internal projections for CCS in 2018 map to the company's actual experience with the technology, with only around 3% of the carbon captured at their Shute Creek facility in Wyoming permanently sequestered underground. The 45Q tax credit revenue will make it feasible for companies to supply carbon capture where it might genuinely be needed on facilities with hard-to-abate emissions, but the vast majority of carbon that US taxpayers are paying oil companies to capture will either be going towards generating more oil or would have had greater emissions reductions benefits if not drilled for gas in the first place.

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## **Meta Has Run Hundreds of Ads for Cocaine, Opioids and Other Drugs**[Archive.is](#):

This article discusses how Meta, the company behind Facebook and Instagram, has continued to run ads on its platforms that promote illegal drugs such as cocaine and opioids, despite promising to enforce against such content. Meta has been under federal investigation for its role in illicit drug sales and has faced claims from parents that the platform is responsible for the overdose deaths of their children. The article highlights that the use of photos in ads may bypass Meta's content-moderation systems and suggests that lawmakers may need to hold technology companies responsible for third-party posts on their platforms.

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## **Stop Destroying Videogames:**

The article discusses the European Citizens' Initiative „Stop Destroying Videogames,“ which aims to prevent publishers from remotely disabling video games, preventing customers from accessing their purchases after support ends. The initiative seeks to require publishers to leave the games in a functional state, allowing customers to continue playing without interference from the publisher. The initiative has garnered support from various countries, with a total of 181,964 signatures collected as of the article's publication date.

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## **Liste der Städte in Euro Truck Simulator 2:**

The article provides a list of cities with their number of firms, other properties, and expansions (if applicable). Major countries mentioned include Spain, Denmark, Italy, France, Germany, Greece, Bulgaria, Poland, Finland, the Netherlands, Portugal, Sweden, Norway, Switzerland, Austria, Czech Republic, Slovakia, Hungary, Bosnia and Herzegovina, Serbia, Turkey, Rumania, Albania, Lithuania, Estonia, Latvia, Belgium, Luxembourg, Denmark, and the United Kingdom.

## **ngtop:**

This article discusses ntop, a command-line program that queries request counts from Nginx's access.log files. It provides various usage examples and explains how it works and its configuration through environment variables. ntop enables users to analyze their Nginx access logs by filtering and counting requests, as well as viewing top user agents, URLs, and IP addresses.

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## **git-sync:**

The article introduces git-sync, a tool designed for backing up and synchronizing Git repositories. git-sync ensures users have a local copy of their repositories to prevent potential issues such as account bans or data loss. The tool is user-friendly, offering a simple configuration file that lets users specify the repositories to be backed up and the storage location. git-sync features include backing up all repositories, efficient bare clones, concurrent syncing, a customizable configuration file, a user-specified backup directory, and multi-platform support for major Git hosting services like GitHub, GitLab, and Bitbucket. The article also provides guidance on setting up and getting started with git-sync, as well as how to report bugs or request features.

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## **Microsoft apologises after thousands report new outage:**

Microsoft has apologized after thousands of people reported issues with their products worldwide, including Outlook email service and Minecraft game. Downdetector showed that most problems were resolved by the evening. This incident occurred just two weeks after a global IT outage left over eight million computers inaccessible. Professor Alan Woodward called it „surreal“ for another major Microsoft outage to happen so soon. The issue affected Microsoft Azure and Microsoft 365, which includes systems like Microsoft Office and Outlook. Most of the issues were resolved by Tuesday evening, with Microsoft's status site showing Microsoft 365 services available and the company saying its Microsoft Azure service was in the „final stages“ of recovery.

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## **The Truth About Linear Regression:**

The book, „The Truth about Linear Regression,“ by Cosma Rohilla Shalizi, is an in-depth guide to understanding and applying linear regression in various scenarios. It covers topics such as simple linear regression, multiple linear regression, collinearity, interaction, outliers, and model selection, with a focus on basic statistical concepts and practical application in R. The book also discusses techniques like the bootstrap and variable selection, as well as advanced topics like polynomial and categorical regression. Throughout the book, the author provides practical examples, exercises, and problems sets to help readers develop a deeper understanding of linear regression.

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## **Why doesn't advice work?:**

This article discusses the idea that people often ignore good advice, even when it is given by

someone they respect or trust. It highlights several potential reasons for this phenomenon: people may not understand the advice, lack confidence in its effectiveness, struggle to take action based on the advice, or have personal biases preventing them from following it. The author also suggests that sometimes advice can be reclassified as something other than „advice“ when it works well and is followed.

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### **A Visual Guide to Quantization:**

This article discusses the field of quantization and its relevance to Large Language Models (LLMs) as a method for reducing model sizes while maintaining accuracy. Quantization involves reducing the precision of model parameters from higher bit-widths (like 32-bit floating point) to lower bit-widths (like 8-bit integers), often improving performance and memory usage on hardware. Methodologies like Post-Training Quantization (PTQ), Quantization Aware Training (QAT), and techniques such as BitNet are introduced, highlighting how quantization can make LLM models smaller while maintaining their accuracy for various applications.

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### **Building a YouTube Video Summarizer with LLM and yt-dlp:**

The article discusses the similarity between two setup configurations and the limitations encountered while testing them with local LLMS, particularly regarding the prompt efficacy and tone/sentiment variations between models. It also mentions that there might be more compliant models in respecting the prompt instructions, assuming comparable parameter sizing.

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### **ZTE-Mobilfunk: Immer dieselben Schlüssel für Voice over WiFi:**

In diesem Artikel wird über das Problem von Voice over WiFi (VoWiFi) berichtet, bei dem die gleichen zehn kryptographischen Schlüssel in ZTE-Mobilfunknetzen verwendet werden. Die österreichische Forschergruppe hat herausgefunden, dass es schlecht um die Verschlüsselung bei VoWiFi steht und es zu vielen Sicherheitslücken in Netzen und Endgeräten kommt. ZTE hat einen Fehler zugegeben und behauptet, dass DH-Schlüssel von geringerer Länge verwendet wurden als vorgesehen. Die Forscher haben vorgeschlagen, verschiedene Maßnahmen zur Verbesserung der Sicherheit bei VoWiFi einzuführen, wie beispielsweise ein verbreitetes und kostengünstiges Verfahren für Netzbetreiber, um Konfigurationsparameter an Endgeräte auszuspielen und zu aktualisieren.

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### **The lie of music discovery algorithms:**

The article discusses how engagement optimization and recommendation algorithms affect music discovery experiences for users. The author shares their idea of generating playlists from images, using AI models like open AI gpt-4-turbo to create connections between the visuals and songs. They mention building a basic NextJS app without any database for images or emails, relying solely on Spotify's authentication. However, the article does not provide detailed technical information on how the system works.

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## Is a 'slow' swimming pool impeding world records?:

The article discusses the factors that affect swimming pool performance, such as depth and sides. It mentions that a shallow pool in Paris caused many swimmers to struggle during the competition. Experts on competitive swimming provided their opinions on pool depths, with some suggesting that anything over 2 meters is unnecessary for performance. The article also briefly addresses surface tension and density/viscosity, which can be adjusted through salt and borates, as factors affecting pool performance.

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## Email explained from first principles:

The article is a comprehensive guide to email, providing an in-depth understanding of its technical aspects and addressing various issues related to security, privacy, and complexity. The author begins by explaining the purpose of email and differentiating it from traditional mail systems. They then delve into the entities involved in the transmission of messages, such as mail clients, outgoing mail servers, and incoming mail servers, along with the protocols they use (SMTP, POP3, IMAP). The article also covers message formats, content encoding, and multipart messages.

In the section on issues, the author discusses spam, privacy concerns, spoofing, phishing, and other security threats. They suggest measures to mitigate these risks, such as disabling remote content, using password managers, and verifying senders. The article also explores the complexity of email systems, including the challenges posed by different appearances and implementations, and the lack of innovation in the field.

The final section focuses on domain authentication techniques like SPF, DKIM, and DMARC, which help prevent spoofing and improve message security. It also covers transport security solutions like DANE and MTA-STS, as well as end-to-end encryption methods (S/MIME and PGP).

In summary, the article serves as a valuable resource for anyone looking to understand email from a technical perspective and address its associated challenges.

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## All I Know About Certificates -- Certificate Authority:

The TLS handshake is an essential step in ensuring server identity, and certificates play a crucial role in this process. Certificates prove the holder's identity as they are issued by authoritative certificate authorities (CAs) to websites. CAs must protect their private keys, ensure website identity through the ACME Challenge, and maintain trust from clients. The client verification process relies on hash value comparison, and building trust for new CAs can be achieved through signing from an already-trusted CA like DST Root CA X3. Trust chains are created with CAs at the top, followed by intermediate CAs and finally the website.

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## We invested 10% to pay back tech debt; Here's what happened:

The article discusses the concept of „bit rot“ or software entropy and its symptoms such as

decreasing MTBF (mean time between failure), increasing LT (lead time), decreased efficiency, and increasing TTR (time to repair or remedy). It highlights that tech debt is one aspect of code maintenance that a development team can control. The article shares the story of a successful approach to dealing with tech debt within a 12-engineer team maintaining two large full stack applications and concludes with practical tips for managing tech debt effectively.

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### **DHH: Make software simple again:**

The software industry has become more focused on profit and complexity rather than innovation, according to David Heinemeier Hansson (DHH), creator of Ruby on Rails framework and co-founder of 37 Signals. DHH criticized uncritical use of cloud technology, subscription models, and complex developer tools. He announced in 2023 that his companies would leave the cloud to save millions of dollars by owning their data centers. DHH also dislikes the SaaS model and has adopted a „once“ business model for two products. He argued for lower barriers for solo developers and small teams, as well as simpler web development tools.

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### **What Adults Lost When Kids Stopped Playing in the Street:**

The article discusses an experiment conducted by Amy Rose and Alice Ferguson in 2009 on Greville Road, Bristol, where they closed the road to traffic for two hours after school to let children play outside. The purpose was to see what would happen when kids had time, space, and permission to play without parental supervision or structured activities. To their surprise, the children played independently, forming connections with neighbors, and reclaiming a sense of community that had been lost due to car-centric societies. The experiment inspired the founding of Playing Out in 2011, an organization helping residents on over 1,000 streets across the U.K. set up their own play sessions. While these initiatives are valuable, permanent changes to built environments may be necessary to restore a culture of street play for children and adults alike.

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### **Monetization & Monopolies: How The Internet You Loved Died:**

This article presents a counterintuitive argument that technology monopolies are actually beneficial for society. It uses case studies of Apple's iTunes and Google's search engine to illustrate how these monopolies funded the development of innovative products and services, fostered an open web, and created positive externalities for consumers. The author argues that while these monopolies eventually decline due to competition, their decline is a natural part of technological progress and leads to new innovations. The article also discusses the negative effects of increased competition on product quality, user experience, and innovation in various industries such as journalism and video games. Overall, the article suggests that technology monopolies play a crucial role in driving technological advancement and creating value for society.

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### **The music industry is engineering artist popularity - listeners are right to be angry:**

The article discusses the frustration of Spotify users who claim that they are repeatedly served the same songs by the platform's algorithm. Some believe this is due to a „mass autoplay feature“ or

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„payola“, while others accuse artists like Chappell Roan, Sabrina Carpenter, and Billie Eilish of being „industry plants“. Spotify introduced „discovery mode“ in 2020, which allows artists to boost their songs' algorithm presence in exchange for a portion of their royalties. The feature has not been widely adopted and its impact on artists is unclear. Fans and the industry worry about the influence of algorithms on music discovery and the potential for manipulation by platforms like Spotify.

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### **"Authentic" is dead. And so is "is dead.":**

This article argues against the overuse of clichés and meaningless phrases in marketing, suggesting that companies should focus on being specific, descriptive, and evocative when promoting their products or services. The author highlights many examples of tired expressions that have lost their impact and urges businesses to find new ways to communicate with customers, emphasizing authenticity, innovation, and meaningful relationships.

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### **Amazon Paid Almost \$1B for Twitch in 2014. It's Still Losing Money:**

The article discusses Twitch's profitability and its possible inclusion in Amazon Web Services (AWS) as a service called Interactive Video Services (IVS). Questions arise about whether Twitch is actually losing money or if it has been shifted to AWS. Additionally, the increased ad density on Twitch might have cost the platform significant revenue. Overall, the profitability of Twitch and its relationship with Amazon remain uncertain due to possible accounting tricks and strategies.

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### **\*Dyēus:**

The summary is as follows: \*Dyēus was the sky or daylight-sky god in Proto-Indo-European mythology, often associated with the vast and bright sky of the day, the rain that brings fertility to the earth, and the concept of all-seeing vision. He was often paired with \*D<sup>h</sup>éǵ<sup>h</sup>ōm, the Earth goddess, representing contrast between the bright seat of the gods and the dark dwelling of mortals. The epithet „Father Dyēus“ (or „Papa Sky“) was inherited in various traditions, including Indo-Iranian, Greek, Roman, Scythian, Palaic, and others. Descendants of \*Dyēus include terms for sky, day, deity, divine, celestial, and the names of specific gods such as Zeus, Jupiter, or Týr. The cult on Mount Tomorr in central Albania is considered a continuation of the ancient sky-god worship. In Slavic tradition, \*Dyēus was demonized and replaced with new deities or concepts like Svarog or the concept of demons.

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### **Is Cloudflare overcharging us for their images service?:**

The article describes a situation where the author's website, EphemeraSearch, faced unexpectedly high charges from Cloudflare Images for its image hosting service. After investigating the issue and contacting Cloudflare support, they found that Cloudflare was overcharging them due to their unusual billing model which combined post-paid (for image delivery) and pre-paid (for image storage). The author suggests that their website's needs are better served by other solutions such as Amazon S3 or replicated dedicated servers.

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### **The Documentation Tradeoff:**

The article argues against the notion of documenting every line of code in programming, suggesting that there should be a balance between documentation and communication through code. It emphasizes the importance of justifying each piece of documentation based on factors such as audience size, stability of information, and cost of delay. Other forms of communication, like simplifying, socializing, testing, and focusing on code quality, are suggested as alternatives to excessive documentation. The author concludes by stating that the focus should be on clear communication rather than just having extensive documentation.

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### **The Four Theories of Truth as a Method for Critical Thinking:**

The four basic theories of truth are correspondence, coherence, consensus, and pragmatic. The correspondence theory is derived from observable reality, the coherence theory is based on logical axioms, the consensus theory relies on large-scale consensus, and the pragmatic theory focuses on what is useful and right for you. Each theory can be questioned but provides lessons in evaluating truth. The correspondence theory is useful for disproving claims, coherence theory identifies logical fallacies, consensus theory relies on expert opinions, and the pragmatic theory assesses practicality.

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### **Android Cross-device services rolling out: Call casting, Internet sharing:**

Google has introduced new Cross-device services features for Android devices, including Call casting and Instant hotspot. With these features, users can move calls between nearby devices and share internet access with their own devices. The setup process involves creating a „device group“ by enabling preferences on signed-in devices. These features are available on Android 11+ phones and tablets running version 24.28.34 of Google Play services or later.

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### **Militärisch oder zivil?: Chinesisches Raumschiff Shenlong bereitet Kopfzerbrechen:**

Das geheimnisvolle chinesische Raumschiff Shenlong ist auf seiner dritten Mission im All unterwegs, während die westlichen Länder weiter über seine Zweckbestimmung rätseln. Es wurde beobachtet, wie es ein Objekt im Orbit aussetzte und sich anschließend wieder annähert. Ein Weltraumexperte deutete dies auf eine militärische Anwendung hin, während der Leiter des Bereichs Weltraumsicherheit beim US-Thinktank Secure World Foundation vermutet, dass es sich um Technologiedemonstratoren handeln könnte. Shenlong ist auf seiner dritten Mission, die im Dezember 2023 begann und dient nach Angaben der staatlichen Nachrichtenagentur Xinhua zum Test von wiederverwendbaren Raumfahrzeugtechnologien.

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### **Why Navajo is the world's hardest language to learn:**

The Navajo language is considered one of the most difficult languages in the world due to its unique grammar, syntax, and tonal pronunciation. With a complex system of 33 consonants and 12 vowels,

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Navajo also distinguishes between long and short vowels as well as pitches. The language is part of the Athabaskan family, spoken by Native American tribes in Yukon, Alaska, and British Columbia. It has been struggling to survive due to historical, economic, and sociocultural reasons, with fewer than half of Navajo's population fluent in their native tongue. Efforts are being made, however, to promote the language through bilingual schooling and increased appreciation for Native American culture.

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### **US claims TikTok shipped personal data to China:**

The US Department of Justice has accused TikTok of sharing personal user data with China and using its platform to profile users based on their views on sensitive topics such as gun control, abortion, and religion. This information surfaced in a filing from the US government opposing TikTok's parent company ByteDance's attempts to dismiss laws forcing the sale of its US operations. The DOJ alleges that an internal tool called Lark was used for sharing restricted user data, which was then accessible by Chinese employees at ByteDance.

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### **Perfectionism - one of the biggest productivity killers in the engineering industry:**

Perfectionism can hinder progress and mental health by making individuals focus on „perfecting“ instead of moving forward. In a collaboration with Jordan Cutler, the author discusses how they initially fell into the trap of perfectionism in their careers as software engineers. They eventually realized that prioritizing progress over perfection led to greater achievements and better mental well-being. To avoid perfectionism, they suggest writing down priorities at the start of the week, shipping the smallest unit of value possible, and seeking early feedback from teammates or managers. The article emphasizes that there is no such thing as „perfect,“ and acknowledging this can lead to increased progress and productivity in both personal and professional lives.

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### **Dual-action antibiotic could make bacterial resistance nearly impossible:**

A new antibiotic that works by targeting two different cellular targets could make it 100 million times more difficult for bacteria to develop resistance, according to research from the University of Illinois Chicago. The synthetic drug macrolones disrupts bacterial cell function and can work in two ways: by interfering with protein production or corrupting DNA structure. Due to this dual-action approach, the bacteria would need to implement defenses against both attacks simultaneously, rendering resistance nearly impossible. Macrolones are synthetic antibiotics that combine the structures of macrolides and fluoroquinolones, which target different mechanisms in bacterial cells. The research team's findings highlight the importance of interdisciplinary collaboration for basic science discoveries.

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### **Metaphor of an Empty Attic:**

In this article, the author, Arthur Conan Doyle, uses a metaphor to describe a man's brain as an empty attic. He explains that one should only store useful knowledge in the brain, as adding more knowledge will inevitably cause some useful information to be forgotten. The key is to carefully select the knowledge to be stored, ensuring that it is useful and organized efficiently. This metaphor appears in the novel „A Study in Scarlet“.

### **I will not do you a quick favour:**

The article discusses the challenges faced by software developers when friends and family expect them to provide free technical support or services, often leading to feelings of frustration and overcommitment. It suggests that people need to learn how to say no without feeling guilty and highlights the importance of setting boundaries in order to avoid constant requests for favors.

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### **Secure Boot is broken on 200 models from 5 big device makers:**

In summary, the article discusses a security vulnerability in Secure Boot, a feature designed to protect devices from bootkits and early drivers during the initial boot process. The vulnerability involves a test key named „DO NOT TRUST - AMI Test PK“ that was inadvertently left in place by some motherboard manufacturers, potentially allowing unauthorized code to be executed on affected systems. This key was intended for testing purposes only but was not properly removed before shipping, leading to potential security risks. Despite the severity of this issue, some companies have chosen not to provide patches due to the end-of-life status of affected devices. The article also touches on the broader issues surrounding Secure Boot and its implementation, such as the reliance on global root of trust and the challenges of managing platform keys.

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### **100% Free eBooks for All Devices:**

This article lists 75 literary works, including novels, plays, and fairy tales by various authors such as Charles Dickens, Mark Twain, Jane Austen, Herman Melville, Leo Tolstoy, and Fyodor Dostoevsky. The list covers a wide range of genres and themes from classic to modern literature.

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### **Secure Boot master key exposure makes it all but useless:**

The researchers at Binarily have found hundreds of PCs sold by Dell, Acer, Fujitsu, Gigabyte, HP, Lenovo, and Supermicro using a 12-year old test platform key (PK) leaked in 2022 to protect their UEFI Secure Boot implementations. They discovered that an attacker with access to the private part of the PK can easily bypass Secure Boot by manipulating the Key Exchange Key database, Signature Database, and Forbidden Signature Database. Over ten percent of the firmware images in Binarily's dataset are vulnerable to exploitation with this untrusted PK, making it „one of the longest-lasting [supply chain vulnerabilities] of its kind.“ This issue compromises the entire security chain from firmware to the operating system.

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### **Children should be allowed to get bored, expert says:**

Dr Teresa Belton, an education expert at the University of East Anglia's School of Education and Lifelong Learning, argues that children should be allowed to get bored so they can develop their creative abilities. She believes that cultural expectations of constant activity may hinder a child's imagination. Belton interviewed several authors, artists, and scientists who shared stories about how

boredom had played a role in their creativity as children. Some of the experts she spoke to include Meera Syal and Grayson Perry, both of whom believe that boredom can be beneficial for adults as well, describing it as a „creative state.“ Dr Belton suggests that children need time to develop their imagination through stand-and-stare time, imagining, and pursuing their own thinking processes. She concludes by saying, „For the sake of creativity perhaps we need to slow down and stay offline from time to time.“

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### **Intents and Hooks - Termux Wiki:**

This article discusses the capabilities of Termux, a terminal emulator and Linux environment app for Android, which can catch intents and execute shell scripts to perform various tasks such as sharing files, opening them in editors, downloading URLs, etc. The article provides examples of creating handles for different purposes like file editing or URL opening, and using common apps to share URLs for downloading.

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### **Awesome Code Review:**

This article is an „Awesome“ list of code review resources, containing articles, papers, and tools related to code reviews. It has gained 4.3k stars and 321 forks on GitHub and is continuously updated with new resources.

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### **Awesome IT Quotes:**

This article is a list of awesome IT quotes, aiming to collect all relevant quotes related to the history of Information Technology. The license for the content is CC0-1.0, and it has received 38 forks and 529 stars.

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### **GitHub - delta-io/delta: An open-source storage framework that enables building a Lakehouse architecture with compute engines including Spark, PrestoDB, Flink, Trino, and Hive and APIs:**

This article discusses an open-source storage framework, delta, which allows developers to build a Lakehouse architecture using various compute engines and APIs. The framework is licensed under the Apache-2.0 license and has gained 7.3k stars and 1.6k forks on its repository.

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### **Awesome Spark:**

This article is about a curated list of Apache Spark packages and resources. It has an CC0-1.0 license and has 1.7k stars and 325 forks. The article mentions that you need to be signed in to change notification settings, but it doesn't provide specific instructions on how to do so.

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### **Awesome asyncio:**

The article discusses an „awesome-asyncio“ list, which is a curated collection of Python asyncio frameworks, libraries, software, and resources. It highlights the popularity of these tools with a significant number of stars and forks.

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### **GitHub - sindresorhus/awesome: 📄 Awesome lists about all kinds of interesting topics:**

The article appears to be a collection of various lists on interesting topics, with no specific focus or summary provided. It also mentions some statistics related to forks and stars, but there is no clear content to summarize.

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### **Schadstoffe: EU nennt Wissings Annahme zu Dieselstilllegung "irreführend":**

The EU responds to Federal Transport Minister Wissing, stating that the Commission has no intention of retroactively changing emissions testing procedures and causing millions of diesel vehicles to be decommissioned. In a letter from EU Internal Market Commissioner Thierry Breton to German Transport Minister Volker Wissing, it was emphasized that the Commission does not intend to make any changes with retroactive effect. The Commission also stated that it would not take any measures that could disadvantage citizens who bought cars in good faith and emphasized that no additional administrative burden should be placed on automakers.

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### **In Frankreichs letzter Telefonzelle klingelt es permanent:**

The last standing, functioning public telephone booth in France is located in Murbach, Alsace. Since a French magazine reported the existence of the booth, it has received numerous international calls from people around the world. Residents and visitors alike answer the phone, noting down the callers' names, locations, and times in a tattered school notebook that lies inside the booth. The booth has become a tourist attraction due to its retro charm. The telephone company Orange confirmed that Murbach is indeed home to France's last public telephone booth.

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### **Tiefseeforschung: metallische Knollen produzieren "dunklen Sauerstoff":**

Researchers recently discovered that metal nodules on the ocean floor produce oxygen without photosynthesis, raising questions about deep-sea mining and our understanding of the origins of aerobic life. In a study published in Nature Geoscience, scientists found that these „dark oxygen“ or „black oxygen“ nodules generate oxygen in areas with complete darkness where no photosynthesis can occur. The research team led by Andrew K. Sweetman from the Scottish Association for Marine Science conducted experiments at the Clarion-Clipperton Zone, an area around 4000 meters deep in the Pacific Ocean. They found that the oxygen levels increased within two days, challenging previous assumptions about processes in the deep sea and potentially having implications for the understanding of early aerobic life in marine ecosystems.

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The possible explanation for this oxygen production could be the abundance of manganese nodules in the CCZ, which generate electric currents due to their electrical potential. These nodules act as „rock batteries“ and can split water into hydrogen and oxygen through a process called electrolysis. However, more research is needed to understand the specific mechanisms involved and the role of these nodules in deep-sea ecosystems.

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### **Belenios: Verifiable online voting system:**

The Belenios article discusses various updates and features released in different versions of the online voting platform Belenios. It includes support for different languages, weighted votes, Condorcet-Schulze, Majority Judgment, and Single Transferable Vote. It also explains the security analysis, threshold encryption mode, and GDPR compliance. The software is available under the terms of the GNU Affero General Public License version 3, and the platform can be set up through an interface accessible through the INRIA CAS server or on request.

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### **3 key preretirement investment tips:**

The article discusses three key preretirement investment tips, including setting up investment buckets for short-, medium-, and long-term investments; rebalancing these buckets annually; and putting money aside for healthcare expenses. The article also highlights the importance of planning Social Security benefits, and the benefits of using a Roth IRA to help pay for healthcare costs in retirement.

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### **Google's web cache is going away. Here are 3 free replacements:**

The article discusses the retirement of Google's web cache feature, which allowed users to access a snapshot of any website from the past, and offers three free alternatives: Bing, the Internet Archive's Wayback Machine, and browser extensions such as Web Archives. These alternatives help users access cached copies of websites without relying on Google's cache system.

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### **Git the stupid password store:**

The article discusses Git, a version control system that uses git credentials to store and manage passwords securely. Git credential helps prevent the need for constant password input when using Git with HTTPS remotes. Various options are available for configuring and managing git credentials, including built-in helpers or third-party tools. By utilizing these methods, users can push changes over an HTTPS remote without entering their passwords repeatedly.

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### **How to Build Anything Extremely Quickly - Learn How To Learn:**

The article suggests using „outline speedrunning“ as an effective method to increase productivity and efficiency in tasks such as writing or programming. This approach involves creating an outline

recursively, filling it in quickly without worrying about quality, and then perfecting the final project after completion. By adopting this technique, users can achieve a 10x speedup compared to traditional methods like „loading-bar“ style. The article emphasizes the importance of mastering fundamental techniques, such as outlining, for overall improvement in performance.

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### **Intel is a Victim of it's Own Arrogance:**

Intel recently announced financial results showing a decrease in revenue, leading to a cut of 20,000 jobs or 1 in 7 employees. The company's stock has dropped 31% over the last month and \$30 billion in market cap was wiped out in a single day. Intel's issues are attributed to its focus on outdated designs and not investing in EUV technology, resulting in ARM, TSMC, and AMD taking significant market share. Additionally, Intel failed to innovate with AI and is now struggling as NVIDIA becomes the 3rd most valuable company globally. The situation may worsen as skilled workers potentially leave due to dwindling stock options packages and invalidated non-competes.

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### **FarmBot Genesis v1.7:**

The FarmBot Genesis v1.7 is a flagship kit designed for prosumers and enthusiasts, featuring advanced technology, features, and options. It comes 90% pre-assembled in the box and can be installed on existing raised beds within an afternoon. This version has new custom track extrusions, weight savings, and optimizations throughout the kit. The FarmBot Genesis is suitable for fixed or mobile raised beds in classrooms, research labs, and backyards. Some items needed to provide include a planter bed, electricity, water, internet, and optional support services.

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### **Passengers at EU Airports Not Allowed over 100ml of Liquids on Cabin Luggage:**

The European Union has reintroduced a temporary 100ml limit on liquids in carry-on luggage due to technical issues with new scanners installed in some airports. This measure is not in response to any new threat but addresses a temporary technical issue, undertaken in alignment with the EU's international partners. Technical information received by the Commission and validated by ECAC States and laboratories shows that the existing configurations of standard C3 EDSCB equipment need revision to improve their performance.

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### **HX711 weight sensor and Zigbee - Zigbee Hobbyist. Rock Pi 4 SBC:**

The HX711 Load Cell Amplifier module is used to convert a load cell's signal into a digital format for processing by Zigbee-compatible chips like CC2652 or CC1352. To connect the HX711 module to a Zigbee device, follow these steps:

1. Assemble the Zigbee device and connect a load cell, power, etc.
2. Configure firmware settings with „Scale factor“ = 1.0 and „Shift“ = 0.
3. Save a custom converter in the Z2M (Zigbee to MQTT) software on the Experts tab and add it to your Z2M device.
4. Join the device to your Zigbee network.
5. Remove any weight from the load cell, take note of the zero value (tare), and enable „Enable zero calibration“ in the Z2M settings.
6. Place a known weight on the load cell, record the measured value,

and calculate the scale factor (Measured value - Zero value) / Weight (in kilograms or pounds). 7. Enter the scale factor into the corresponding field in Z2M and update the constants in the firmware for re-flashing. 8. To control the device using MQTT, use the zigbee2mqtt/[friendly\_name]/[channel]/set/brightness command with a value between 1-99999999 (scale factor).

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### **Gadgetbridge: Huawei Watch Fit 3 datenschutzfreundlich nutzen - Teil 3:**

In this article, we discuss the use of Gadgetbridge as a data-privacy friendly alternative to manage smartwatches and fitness trackers independently from their original apps. We also provide an in-depth look at Huawei Watch Fit 3 in combination with Gadgetbridge. The article highlights the setup process, features, and some limitations of using Gadgetbridge as a controller for Huawei Watch Fit 3. Overall, this combination offers a privacy-friendly way to use smartwatch functions without sending personal health data to the manufacturer.

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### **Massenüberwachung als Dienstleistung: Der Handel mit Standortdaten:**

Die Recherche von netzpolitik.org und BR zeigt, dass Datenhändler über Milliarden von Handydaten verfügen. Ein Datenhändler stellte den Journalisten eine Gratisprobe von 3,6 Milliarden Standortdaten aus Deutschland zur Verfügung, zusammen mit einer Mobile Advertising ID (MAID) wie z.B. der Google Advertising ID des Betriebssystems Android. Es ist leicht für Journalisten, Bewegungsprofile zu erstellen, indem sie auf diese Daten zugreifen. Die Erkenntnisse können Rückschlüsse auf Lebensgewohnheiten, Beruf und Wohnort ziehen und auch mit sozialen Netzwerkinformationen angereichert werden. Dies kann dazu führen, dass Personen identifizierbar sind und besonders kritisch ist, wenn sie in Militär oder Geheimdiensten arbeiten. Der Podcast von 11KM bietet einen guten Einstieg in das Thema der Überwachung und Datenschutz. Die Verwendung von Standortdaten als Handelsware hat im Laufe der Zeit zu verschiedenen Sicherheits- und Datenschutzrisiken geführt, da Personenbezogene Daten von bestimmten Wirtschaftsakteuren gehandelt werden. Die gesellschaftliche Debatte dreht sich darum, ob wir als Gesellschaft akzeptieren, dass unsere persönlichen Daten wie eine Ware an den Meistbietenden verkauft werden.

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### **iOS: Eine kurze Zwischenbilanz nach einer Woche Nutzung:**

The user is currently using an iPhone 15 with iOS 17 (version 17.5.1) for 12 weeks in their daily life, and after one week, they are disappointed with Apple's privacy/data protection measures. The App Privacy Report is a good idea but the execution is lacking. Network activity tracking is incomplete, making the report unreliable or not informative. Despite deactivating iCloud, iOS regularly connects to domains that can be classified as tracking/advertising. The Apple ecosystem requires users to put part of their digital world in Apple's care, which can be restrictive for non-Apple software and services users. Some settings seem to reset or change unexpectedly. The Control Center lacks complete Bluetooth and location service deactivation options. Despite the criticisms, the user appreciates the battery life and Shortcut app.

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### **Australia must treat housing as a human right, says former Victorian Supreme Court**

**judge:**

Australian society's housing crisis has become a socio-economic and human rights disaster, according to former Victorian Supreme Court justice Kevin Bell. He argues that the values underlying Australia's modern housing system prioritize property as a commodity rather than a home and human right. Bell suggests implementing a national housing strategy with a shift in values, legislation, and comprehensive planning. This would involve making housing the „Great Australian Right“ and having it serve as government's primary responsibility. He believes that Australia needs to legislate a different enabling environment for the housing system based on realizing the human right to a decent home.

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**GitHub copilot—Lessons:**

The article discusses the author's experience with using GitHub Copilot, an AI-powered code generation tool, in their programming projects. While initially impressed by its capabilities, the author found some flaws and annoyances as they continued to use it. These include its performance in writing code from scratch, issues with generating tests accurately, and concerns about problem-solving and critical thinking skills among newcomers to the field. The author also acknowledges that GitHub Copilot is useful for scanning existing code for errors, understanding obscure codebases, learning new programming languages, and working with languages with extensive open source codebases.

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**Saying the Quiet Part Out Loud:**

Two billionaire Democratic donors, Barry Diller and Reid Hoffman, have publicly pressured Vice President Kamala Harris to replace FTC Chair Lina Khan. Wall Street insiders are worried that such actions may backfire. Some have returned to traditional fundraising methods, while others have openly called for Harris to oust Khan. Critics argue that this public lobbying is self-interested and could backfire.

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**When Elder Care Is All in the Stepfamily:**

Studies show that adult children are less likely to assist an aging stepparent, resulting in a growing „step gap“ in senior care. Beverly K. Brandt, recalling her experience as a caregiver for her stepfather, recounts how she coordinated his medical appointments and prescriptions after he moved into a retirement community following the death of his wife. She was asked why she was doing this since he was not a blood relative; however, Brandt could not understand the question as she considered him a loving father figure who supported her throughout her life.

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**Hackers breach ISP to poison software updates with malware:**

A Chinese hacking group, StormBamboo, has compromised an undisclosed internet service provider (ISP) and used it to inject malware into automatic software updates. The cyber-espionage group, also known as Evasive Panda, Daggerfly, and StormCloud, has been active since 2012, targeting

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organizations across mainland China, Hong Kong, Macao, Nigeria, and various Southeast and East Asian countries. Volexity threat researchers revealed that the hackers exploited insecure HTTP software update mechanisms to deploy malware on victims' Windows and macOS devices. After compromising targeted systems, StormBamboo installed a malicious Google Chrome extension called ReloadText, allowing them to steal browser cookies and mail data.

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### **How WASD became the standard PC control scheme:**

This article discusses the history and rise of the WASD control scheme as the standard for PC gaming. It begins by mentioning the original preference for the arrow keys in 3D games and the eventual shift to the WASD keys for their comfort and easy access to Shift and Space. The article credits the greatest Quake player, Dennis „Thresh“ Fong, with popularizing the style. It explains how Fong discovered the WASD control scheme and how its adoption by him and other influential players helped popularize it. The article also discusses how Half-Life, Quake 3, and other games made WASD the default control scheme in 1998 and 1999, cementing its dominance in PC gaming.

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### **Microsoft Word - Brooks&Clark\_LootBoxMigration\_PreprintDec2022.docx:**

This longitudinal study aimed to explore the relationship between video game microtransactions, specifically loot boxes and direct purchase microtransactions (DPMs), and gambling behavior among young adult gamers. The study was conducted over a six-month period and involved two subgroups of participants: non-gamblers and gamblers at baseline assessment.

The findings indicated that cross-sectionally, gamblers were more likely than non-gamblers to purchase loot boxes, sell loot box items, and spend more on both loot boxes and DPMs. The study also found a significant association between loot box engagement among the non-gamblers at baseline and migration to gambling at follow-up. This relationship was not observed for DPM expenditure, suggesting that randomized rewards offered by loot boxes play a key role in this migration.

Exploratory analysis further indicated that gambling-related cognitive distortions predicted future loot box expenditure, supporting the reverse pathway hypothesis where gamblers are attracted to loot box features when playing video games. However, PGSI and gambling spend did not significantly predict loot box use after correction for multiple comparisons.

The study concludes by emphasizing the need for regulatory action to reduce youth and young adult exposure to loot boxes due to their potential risks in promoting gambling behaviors.

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### **Wacken: Holy Ground eröffnet - 30.000 nach Hause geschickt:**

The Wacken Open Air festival faced challenges due to continuous rainfall, making the grounds increasingly muddy. Out of safety concerns, the organizers imposed a halt on entry for 30,000 attendees who were sent home. This decision upset many metalheads who felt that their rights had been violated.

### **Why Old Sports Photos Often Have a Blue Haze:**

This article discusses the presence of a blue haze in old sports photos, which is a result of cigarette smoke in the arenas during the time the photos were taken. The article also explains that the California Indoor Clean Air Act of 1976 began to reduce public smoking, leading to a change in arena lighting and ultimately the loss of the nostalgic blue haze effect in more recent sports photos.

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### **Sie sind im Bereich : Der Taunus-Sound (1988):**

In diesem Artikel wird die Geschichte der Entwicklung des Taunus-Sounds bei den Lautsprechern Braun, Heco und Canton erzählt, insbesondere der Rolle von Wolfgang Hasselbach als Chefentwickler bei Braun und Wolfgang Seikritt als Lehrlingskollege bei BRAUN. Die Entwicklung begann mit dem Versuch, die weichen Elektrostaten von Quad in Lizenz zu bauen, jedoch kam es zu Problemen mit der Konstruktion und den Verkäufern.

Infolgedessen entwickelte Seikritt ein eigenes geschlossenes Boxenprinzip basierend auf dem Patent von Edgar Villchur von Acoustic Research, wobei er weiche aufgehängte Membranen und gewebete Kalotten-Membranen verwendete. Die erste Box, die diese Technik einsetzte, war die L60 von Braun, die jedoch Probleme mit Knattern hatte.

Die Entwicklung wurde weiter fortgesetzt, bis Seikritt schließlich zu Heco wechselte, um dort weiche aufgehängte Tieftöner und Gewebemittelton-Kalotten zu entwickeln. Die erste Box, die diese Technik einsetzte, war die B220 Soundmaster von 1966, welche der Beginn des Taunus-Sounds markiert.

In den folgenden Jahren entwickelten Heco, Canton und Acron ihre eigenen Lautsprecherboxen, wobei die meisten der ursprünglichen Entwickler in diese Firmen wechselten. Heute ist der Taunus-Sound in den heutigen Lautsprechern von Heco, Canton, Acron oder Sonofer nahezu verschwunden, aber seine Geschichte bleibt für Audiophile interessant.

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### **Common I/O Tasks in Modern Java - Dev.java:**

This article focuses on tasks that application programmers are likely to encounter in web applications, such as reading and writing text files, reading text, images, JSON from the web, visiting files in a directory, reading a ZIP file, and creating a temporary file or directory. The Java API supports various I/O tasks, including UTF-8 as the default for I/O since Java 18. Improvements since Java 8 include the `java.nio.file.Files` class, `java.io.InputStream` gaining useful methods in Java 9, 11, and 12, and the `java.io.File` and `java.io.BufferedReader` classes becoming obsolete. The article provides detailed examples of reading and writing text files, traversing directory entries, working with ZIP files, and creating temporary files and directories using the Java API.

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### **China is slowly joining the economic war against Russia:**

This article discusses Chinese exports of ball bearings to Russia and how they have been reduced following Putin's invasion of Ukraine in 2022. The economic response to the invasion progressed

through two stages, with the first focusing on reducing economic linkages between Russia and liberal democracies, while the second stage aimed at non-coalition countries like China to cut ties with Russia. This has been achieved through secondary sanctions by the U.S. Treasury's Office of Foreign Assets Control (OFAC) and increased export controls by the U.S. Department of Commerce's Bureau of Industry and Security (BIS). The article also mentions that China is a key source for goods destined for Russia's battlefield, with 47% of Russian parts linked to Chinese producers. Furthermore, it discusses how various measures are working in reducing high priority exports from China to Russia, indicating the effectiveness of the economic war against Russia.

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### **Open Source Alternatives to Google Photos that Can be Self Hosted:**

This article discusses open-source alternatives to Google Photos and how they offer more privacy by allowing users to self-host their data and photos. The options include Immich, PhotoPrism, Nextcloud Photos, Chevereto, LibrePhotos, Piwigo, Lychee, Photoview, and Ente. Each alternative has its own set of features and functionalities, such as facial recognition, image organization, mobile apps support, and automatic backups. Users can choose the most suitable option based on their preferences and requirements for managing and organizing photos.

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### **Install SCALE - SCALE documentation:**

The article discusses how to install SCALE on Linux operating systems such as Debian-like Linux (Debian, Ubuntu, Mint) and other Linux distros. It provides instructions for setting up the ROCm 6.0.2 package repository, downloading and installing the required packages, and adding your user account to the render group. The article also mentions that if the kernel is too old, a kernel driver needs to be installed as well.

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### **HOW THE FUCK DO I GET PAST THE TUTORIAL IN DRIVER!:**

In this article, users discuss their experiences and memories of playing the game „Driver“ and its notoriously challenging tutorial. They share tips, tricks, and personal stories of overcoming the tutorial, and some users even mention that it took them several hours to complete it. The tutorial is considered one of the most frustrating introductions to a game in history by many.

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### **The Upstream Cause of the Youth Mental Health Crisis is the Loss of Community:**

The article discusses the loss of community as one of three factors contributing to the deterioration in youth mental health, along with the decline of play and the emergence of phone-mediated childhood. It argues that the upstream cause of the youth mental health crisis is the loss of community, as virtual connections grow further apart. The article suggests that real-world human communities and neighborhoods are necessary for thriving mental health, and provides a roadmap to strengthen them.

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### **Rails is Good Enough:**

The article celebrates the 20th anniversary of Ruby on Rails, an influential web application framework. Despite not being the most popular framework, it has been widely used by bootstrapped founders and large tech companies alike. The author emphasizes that Rails is a mature technology with a rich history, a productive environment for developers, good enough for many cases in building modern applications, and attracts people who are more interested in building things than debating tech. They also note the importance of not having to worry about the technical details when focusing on business aspects.

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### **Oscar, an open-source contributor agent architecture:**

The Oscar project aims to improve open-source software development by creating automated help, or „agents,“ for open-source maintenance. By leveraging large language models (LLMs) and their ability to analyze natural language and control deterministic tools, agents can interact with people more smoothly in open-source projects. The project focuses on reducing the amount of toil involved in maintaining open-source projects by automating not-fun tasks such as processing issues and matching questions to existing documentation. Oscar is currently being developed under the Go project and aims to create an architecture that can be reused and extended for other software projects.

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### **The reanimation of pseudoscience in machine learning and its ethical repercussions:**

In the article, it is argued that machine learning has a pseudoscience problem and is entwined with the systematic epistemic misuse of these tools. Recently, deep learning-assisted physiognomic research has emerged as a case study, highlighting the need for philosophical, historical, and domain-specific perspectives of particular sciences in the prevention and remediation of misused ML. In practice, the epistemic and ethical dimensions of ML misuse often arise from shared underlying reasons and are resolvable by the same pathways. To address these issues, the article offers resources for research best practices to developers and practitioners.

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### **Argo Workflows:**

Argo Workflows is an open source container-native workflow engine that allows users to orchestrate parallel jobs on Kubernetes. It is designed for containers and provides benefits such as cloud agnosticism, easy management of complex workflows, and running CI/CD pipelines natively on Kubernetes without additional software development tools. Argo Workflows enables users to run compute-intensive tasks like machine learning or data processing much faster than traditional methods.

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### **How to Use SAM 2 for Video Segmentation:**

Segment Anything Model 2 (SAM 2) is a unified video and image segmentation model that demonstrates improved accuracy in video segmentation with fewer interactions than previous approaches. It is more accurate for image segmentation and faster than the original Segment Anything Model. SAM 2 offers better performance in object motion, deformation, occlusion, lighting

changes, and lower resolution videos compared to images. However, it may struggle with segmenting objects across shot changes, tracking confusions in crowded scenes or long videos, and accurately tracking objects with thin or fine details.

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## **FLUX:**

This article describes an official inference repo for FLUX.1 models by Black Forest Labs. It contains minimal inference code to run text-to-image and image-to-image with their Flux latent rectified flow transformers. The article lists different models, their HuggingFace repos, licenses, and md5sum, as well as usage instructions for different platforms like Replicate, FAL, and GitHub. It also provides API usage and integration with the diffusers library, and an easy python interface for API access.

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## **Announcing Flux by Black Forest Labs: The Next Leap in Text-to-Image Models:**

This article discusses the release of Flux, an open-source text-to-image model developed by Black Forest Labs (BFL) with 12B parameters and available on fal. It pushes creativity and performance with aesthetics reminiscent of Midjourney. BFL has released three variations of the model: FLUX.1 [dev], FLUX.1 [schnell], and FLUX.1 [pro]. With the integration of fal's cutting-edge inference engine, Flux models can run up to 2x faster than with eager torch, resulting in better processing times while maintaining exceptional quality and detail.

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## **Why CSV is still king:**

The Comma Separated Values (CSV) format has been a popular choice for storing and sharing data since the early days of computing. Despite its challenges, such as lacking official standards and character encoding issues, CSV remains prevalent due to its simplicity, widespread use, and human-readability. Efforts are being made to standardize CSV further and create tools to better handle its quirks, ensuring its continued relevance in the data landscape.

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## **gitopper:**

The article describes gitopper, a tool that facilitates GitOps workflows for non-Kubernetes environments. It watches a remote git repository, pulls changes, and reloads server processes. gitopper supports sparse checkouts, diff detection, out-of-band rollbacks, and canarying. It uses SSH keys for authentication, and its options include config file, hosts, SSH port, metric port, debug, and restart. The article also mentions that gitopper has various features implemented, such as metrics, diff detection, out-of-band rollbacks, and canarying.

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## **Book - LoRaWAN:**

This chapter focuses on the LoRaWAN protocol, its network structure, security features, device classes, activation methods, and power consumption optimization techniques. The LoRaWAN network

consists of devices, gateways, and servers with various functionalities, and it is secured through authentication and encryption. Devices are categorized into A, B, or C classes based on data exchange ease and power consumption trade-offs. Two activation methods (ABP or OTAA) are explained, along with their advantages and disadvantages. Finally, ADR (Adaptive Data Rate) is introduced as an adaptive and automatic method to optimize device autonomy by optimizing transmission parameters and power consumption.

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### **Unprofessionalism:**

The article discusses the importance of being true to oneself and embracing one's humanity while still taking their profession seriously. It mentions that when a person has a larger audience, they are likely to receive more criticism for their actions or opinions due to the wide range of topics they may touch upon. The author shares experiences from their own app, Party Monster, which included a „Refuse to Play Nickelback“ preference setting as an unprofessional but fun easter egg. They received positive and negative feedback, but overall, it is essential for professionals to remain true to themselves while delivering their work.

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### **Proposed rule would ban airlines from charging parents to sit with their children:**

The U.S. Department of Transportation has proposed a new rule that would ban airlines from charging parents more to sit with their young children. Under the proposal, U.S. and foreign carriers would be required to seat children 13 or younger next to their parent or accompanying adult for free. If adjacent seats aren't available when a parent books a flight, airlines would be required to let families choose between a full refund, or waiting to see if a seat opens up. If seats don't become available before other passengers begin boarding, airlines must give families the option to rebook for free on the next flight with available adjacent seating. The Biden administration estimates this rule could save a family of four as much as \$200 in seat fees for a round trip.

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### **Nothing in evolution makes sense except in the light of parasitism: evolution of complex replication strategies:**

In the Royal Society article titled „The evolution of complex replication strategies in the Stringmol automata chemistry“, the researchers investigate how complexity can evolve at the expense of replication speed using the Stringmol automata chemistry. They document the evolution of replicators in a spatial arena and study how the emergence of parasites, which are replicated but do not harbor replication potential, can influence this evolutionary process. The researchers find that parasites, traditionally seen as a threat, are instead the means by which complexity can evolve, provided that spatial pattern formation prevents extinction.

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### **How middlemen are gaming the H-1B program:**

The H-1B lottery process has become a problem due to a small change in the USCIS application process, which made it more democratic and accessible for applicants. Previously, everyone had to submit a full application packet along with fees, but now IT staffing companies can pre-register for the

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lottery by paying a nominal fee of \$10. This small change makes the whole process more democratic to a vast number of people who work at IT firms in India and allows them to apply without having to bear any lawyer costs.

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### **Two new dementia risks identified by major report:**

A major report has identified 14 health issues, including high cholesterol and failing eyesight, which could theoretically prevent almost half of dementias worldwide if reduced or eliminated. The Lancet Commission's latest report suggests that middle-aged people and poorer countries have the most to gain from targeting these risk factors. Dementia occurs when a disease damages nerve cells in the brain, leading to confusion and memory loss; however, it is not an inevitable part of getting old. The researchers have drawn up a list of recommendations for governments worldwide, including making healthy lifestyles achievable for everyone and reducing social isolation.

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### **A Blood Test Accurately Diagnosed Alzheimer's 90% of the Time, Study Finds:**

Researchers have developed a blood test that is significantly more accurate than cognitive tests and CT scans in detecting Alzheimer's disease. Published in the journal JAMA, the study found that the blood test correctly identified whether patients with memory problems had Alzheimer's about 90% of the time, while doctors using standard methods were accurate only 61-73% of the time. This development brings the field closer to affordable and accessible ways to diagnose Alzheimer's disease, which affects over 32 million people worldwide.

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### **Vanilla OS 2 is a radical distro with a friendly face:**

Vanilla OS is an experimental Linux distro that aims to test new implementations such as immutability, cross-distro packaging, A/B failover, and more. The latest version, Vanilla OS 2 Orchid, has switched from Ubuntu as its base to Debian Sid, a rolling, test release. This distro supports various package formats including Flatpaks, Alpine, Debian, Fedora, Arch, openSUSE, Appliance, and an Android runtime based on Waydroid. However, the Vanilla OS 2 Orchid feels unfinished in practice, with some features not functioning properly or being limited in their use.

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### **Differences in cancer rates among adults born between 1920 and 1990 in the USA: an analysis of population-based cancer registry data:**

The article discusses the trends in cancer rates among US adults born between 1920 and 1990 based on data from the North American Association of Central Cancer Registries and the US National Center for Health Statistics. It reports that incidence rates increased in successively younger birth cohorts for eight of 34 cancers, after adjusting for age and period effects, suggesting an increased cancer risk in younger generations. The increasing cancer rates might be due to increased exposure to carcinogenic factors during early life or young adulthood.

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## Google listed my restaurant's number as its British HQ:

A restaurant owner experienced four years of constant harassment when Google mistakenly published their business details in search results for „how to contact Google in the UK“. The owner received up to 300 calls, messages, and letters weekly on both personal and professional lines. Despite numerous attempts to contact Google and use their feedback button, the issue persisted until the restaurant owner reached out again. Google finally took action after investigation, removing the business details from search results for the query. The owner feels relieved but wishes they had received an apology for the inconvenience suffered.

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## How I Got My Laser Eye Injury - Funranium Labs:

The article recounts a story told to the author about a laser safety officer who encountered a group of people testing an improperly set up Quanta-Ray laser system outside their workplace. The laser beam caused damage to the vehicle and potentially posed risks to nearby employees, including the Laser Safety Officer. The incident highlights the importance of proper laser safety procedures and the consequences of not following them.

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## NotShazam

SeekTune is an implementation of Shazam's song recognition algorithm that integrates Spotify and YouTube APIs to find and download songs. It requires Golang, FFmpeg, and NPM to be installed. The usage includes starting the backend and client, downloading songs, saving local songs to the database, finding matches for songs, and deleting fingerprints and songs. It offers support for SQLite as the default database, with MongoDB as an alternative option.

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## Datenschutz: Geldstrafen wegen Videokameras in Autos und Wohnhäusern:

The article states that more complaints are being filed with the Saxon Data Protection and Transparency Commissioner due to video surveillance. In the past six months, 115 complaints were received, which is a 20% increase compared to the previous year. Most of these complaints come from people criticizing their neighbors for installing cameras. This year, five fines have been imposed for in-car video cameras and two for stationary cameras in multi-family homes, ranging from €100 to €900 each. In one case, a fine of €30,000 was issued. The increase in complaints highlights that more people are feeling restricted in their freedom due to privately motivated video surveillance.

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## The climate is changing so fast that we haven't seen how bad extreme weather could get:

Extreme weather events are becoming more frequent due to Earth's rapidly warming climate, predominantly caused by fossil fuel burning. Climate scientists define „climate“ as the distribution of possible weather events observed over a length of time. However, when the climate is changing rapidly, this traditional definition falls short and leaves us underprepared for extreme weather events. Ensembles, which are multiple runs of the same weather or climate model with slightly differing outcomes, can help to better understand these extremes. As global temperatures continue to rise,

potential extremes have probably shifted even further from what has been experienced before, so we may not be as lucky in future events.

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### **“AI toothbrushes” are coming for your teeth—and your data:**

The article discusses the rise in popularity of AI toothbrushes, which use advanced algorithms and companion apps to help users brush their teeth better. Although there is limited scientific evidence that these AI algorithms improve oral health, companies are interested in using tech-equipped toothbrushes for user data collection purposes. Companies like P&G's Oral-B, Philips, and Oclean have released AI toothbrushes with connected e-commerce apps, allowing users to order products and potentially diversify the company's business. However, there are concerns about privacy and whether these toothbrushes actually deliver on their promises of improving oral hygiene.

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### **Warum Diamanten viel weniger wert sind, als alle denken (Video):**

In diesem Video wird die Geschichte von Ibrahim Fofana erzählt, der während des Bürgerkriegs in Sierra Leone gezwungen wurde, seine Hände abzutrennen, nachdem Rebellen ihn und andere Männer fälschlicherweise für die Wahl eines korrupten Präsidenten verantwortlich machten. Die Rebellenarmee RUF nutzte Diamantenminen in Sierra Leone finanziell und als Mittel zur Unterstützung ihres Aufstands. Der Film „Blutdiamanten“ thematisiert diese Tragödie und die Verbindung zwischen Blutdiamanten und Konflikten in Afrika.

Es wird argumentiert, dass Diamanten nicht wirklich selten sind und dass es technisch möglich ist, Diamanten im Labor zu erzeugen. Diese sogenannten „Labor Diamanten“ können momentan noch unterscheiden werden und sind teilweise sogar günstiger als natürliche Diamanten, was auch darauf hindeutet, dass natürliche Diamanten in Zukunft möglicherweise von Labordiamanten verdrängt werden könnten. Ein weiterer Punkt des Videos ist die Verbreitung von Märchen und Marketingstrategien rund um den Wert und die Seltenheit von Diamanten, um Kunden dazu zu bringen, diese teuren Edelsteine zu kaufen.

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### **Why Beaches Need More Sand (Video):**

The YouTube video discusses the issue of eroding beaches due to climate change and rising sea levels, as well as the process of beach nourishment. Beach nourishment involves adding sand from nearby rivers or the bottom of the ocean to replenish beaches that are experiencing erosion. The video highlights both the benefits and drawbacks of this practice, such as its ability to protect coastal areas from natural disasters like hurricanes but also the potential negative impact on marine life and ecosystems. While beach nourishment may provide short-term solutions, it raises concerns about long-term sustainability in light of climate change.

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### **Was wäre, wenn das Internet für einen Monat global ausfallen würde? Gedankenexperiment SRF (Video):**

The video discusses the potential consequences of a global internet shutdown and how it could lead

to chaos and disruption in various aspects of life. Key points include:

1. Communication breakdown: The lack of communication would significantly impact daily tasks, such as train schedules, ticket purchases, and ordering replacement parts.
2. Impact on globalization: A total internet collapse could result in the collapse of globalization, leading to widespread economic and social issues.
3. Digital dependency: People have become heavily reliant on digital services for various aspects of life, such as online banking and communication.
4. Alternative technologies: The video also highlights the importance of other essential technologies like electricity, water pipelines, and traditional telephone services based on IP protocol technology.
5. Changes in daily life: To adapt to an offline world, people might revert to using land maps for navigation, physical iPods for music, and meeting friends face-to-face for entertainment.
6. Resilience of the internet: The video emphasizes that the internet is a robust technology designed to handle local issues and can be managed even if individual devices fail or are replaced.

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### **Code Aufräumen - Kent Beck's "Tidy First" mit Marco Emrich 1 & 2 (Video):**

The Transcript eines Youtube Videos discussed the book „Tidy First“ by Ken Beck, one of the creators of Extreme Programming. The hosts, Ebert and Marco Emrich, explored various Tidings (small refactoring techniques) presented in the book to improve code readability and maintainability. They also addressed criticisms of the book, emphasizing its value for developers at different skill levels.

The topics covered in the Transcript eines Youtube Videos include:

1. Introduction: Ebert and Marco Emrich introduce themselves and discuss upcoming events related to software development.
2. Refactoring and Tidying: The hosts define refactoring as changing the structure of software without altering its behavior, emphasizing the importance of maintaining existing functionality during refactoring. They also discuss how the term „refactoring“ has been misused in some contexts, leading to negative perceptions.
3. Introduction to Tidings: Ebert and Marco explain what Tidings are (small refactoring techniques) and their purpose. They highlight that Tidings focus on improving code readability without making significant structural changes.
4. Example 1 - Guard Clauses: The hosts demonstrate how using guard clauses can simplify complex conditional logic by moving the decision-making process to the beginning of a method, resulting in more readable and maintainable code.
5. Example 2 - Dead Code Removal: Ebert and Marco discuss a scenario where an interface is not being used consistently across different parts of the application. They suggest refactoring the code by introducing a new interface that better suits the specific use case, while still utilizing the existing implementation to maintain functionality.
6. Example 3 - Method Reordering for Cohesion: The hosts explain how rearranging methods in a class can improve readability and cohesion by grouping related functions together. They also address the potential drawbacks of this approach, such as increased complexity when refactoring larger codebases.
7. Example 4 - Inline Initialization: Ebert and Marco discuss the benefits of inline initialization for variables, particularly in languages where variable declarations are separated from their

initializations. This technique helps maintain a clear connection between declaration and usage, reducing confusion for readers of the code.

8. Criticism of „Tidy First“: The hosts address criticisms of the book, including the assertion that it covers well-known material without providing new insights. They argue that the book's focus on readability is valuable, especially for developers who may not have encountered these concepts before or need a refresher on best practices.

9. Code Retreats: Ebert suggests hosting code retreats at one's own company to encourage team members to engage in pair programming and practice test-driven development, refactoring, and other handcraft skills. This could help foster a deeper understanding of software design principles and improve the overall quality of the codebase.

Summary: The Transcript eines Youtube Videos provided an overview of Tidings from Ken Beck's „Tidy First“ book, with the hosts demonstrating several examples and discussing their benefits for improving code readability and maintainability. They also addressed criticisms of the book, highlighting its value in reinforcing fundamental software development practices for developers at various skill levels.

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### **Brazil Should Be a Superpower, but It Isn't... (Video):**

The transcript of the YouTube video discusses Brazil's economic growth and collapse between 2016 and 2018. Key points include:

- In 2016, Brazil should have been crowned as a major economic superpower due to its fast-growing industries and improvements in life expectancy, access to healthcare and education, average income levels, investor confidence, political stability, global influence, social mobility, and currency value.
- However, the 2016 Olympic Games were a major embarrassment for Brazil as facilities were barely constructed in time, arenas surrounded by waste, and hosting the games bankrupted the city. This led to challenges that had not improved since its peak in 2016.
- By 2018, Brazil lost nearly half of its GDP due to corruption scandals and political instability, making it difficult for the country to regain its previous success.
- The video also discusses how Brazil was able to become one of the fastest growing economies in the world and the reasons behind its collapse. It highlights the potential for Brazil to recover from this crisis and live up to its full economic potential.

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### **80% of programmers are NOT happy... why? (Video):**

The transcript of the YouTube video discusses the challenges faced by professional developers in today's world. Key points include:

1. Financial dissatisfaction: Despite high salaries, programmers are not as well-paid as one might think. The median salary for PHP, a popular programming language, is \$49K, and specialized languages like Erlang and low-level languages like Rust earn better salaries.

2. Technical debt: This shared frustration among professional developers arises from building on

flawed code bases for years or decades due to the difficulty of starting over.

3. Hustle-or-die culture: The pressure to meet unrealistic deadlines and expectations, often stemming from corporate bureaucracy and a lack of meaningful work, contributes to unhappiness in the industry.

4. Job instability: Programmers are prone to job turnover due to high salary potential by switching jobs or being laid off around the age of 25 when they become too old to code.

5. Unhealthy lifestyle: Sitting at a desk all day can be harmful, and finding time for exercise is essential for mental well-being.

In conclusion, although programmers face numerous challenges such as financial dissatisfaction, technical debt, unrealistic expectations, job instability, and unhealthy lifestyles, it's important to recognize that out of suffering have emerged the strongest souls, and those who endure these difficulties can grow and develop character.

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### **The Number One Rule for Healthy Relationships (Video):**

The video discusses the importance of effective communication in relationships to ensure their health and longevity. It highlights that people often express their feelings and emotions indirectly or harshly, leading to misunderstandings and hurt feelings. By turning phrases like „I don't care“ into more honest statements such as „I miss you,“ the video suggests that relationships can be improved by being candid yet respectful. The speaker also mentions that people should learn how to express their emotions in a polite and considerate manner, rather than focusing on multitasking or over-complicating things. Overall, this video emphasizes the importance of communication and honesty in relationships for their success and well-being.

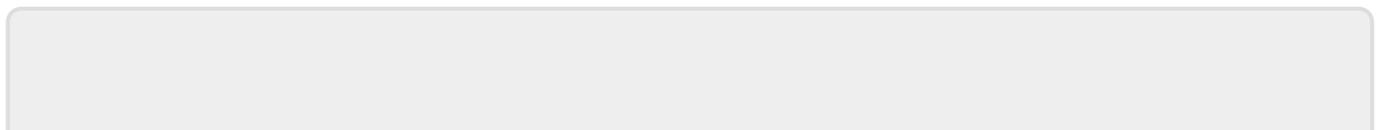
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### **The \$64M Race to Save the Eiffel Tower (Video):**

The Eiffel Tower, built for the 1889 World's Fair, has become an iconic symbol of Paris and France. However, it faces an ongoing battle against rust caused by wind and rain in Paris. A \$64 million repaint effort is currently underway to maintain its appearance and prepare it for the 2024 Paris Olympics. Critics argue that this repaint only addresses cosmetic issues rather than addressing advanced rust damage. The Eiffel Tower's original design, by engineer Gustave Eiffel, featured an iron structure with a wind-resistant shape to counteract sinking marble and granite foundations in earlier structures. Despite initial criticism from Parisians, the tower has become a beloved landmark and serves various scientific purposes, including meteorological observations and wireless telegraphy. The current repaint may not be enough to address rust issues and could potentially worsen them. Future maintenance efforts will be crucial for preserving this iconic structure.

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