

1. Den digitale (mobil-)Revolution

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Vi har i mange år vænnet os til at have vores telefoner med os overalt, og telefoner er i dag så smarte og beregningsmæssigt kraftfulde at de kan erstatte almindelig dagligdags brug af computer: vi kan shoppe på Amazon, købe billetter til den næste biograffilm, streame Netflix og HBO. Vi kan sågar checke vores netbank og vores sundhedsjournal via telefonen — det blev især anvendeligt under Coronaepidemien — der er digitale sygesikringskort og kørekort som Apps. Når vi skal logge ind på offentlige sider skal vi bruge 2Faktor autentificering hvilket vi gør gennem en App (MitID eller NemID). Alting i vores moderne liv er bundet op på vores telefoner.

Hvad sker der egentlig hvis vores telefoner bliver stjålet? Hvis der kommer malware ind på telefonen? Hvad med ældre mennesker der ikke er så klar til den digitale revolution? Hvordan får de betalt deres regninger, hvis de skal bruge en App eller en obskur netbank med MitID login? Hvordan kommunikerer de med det offentlige, hvis det offentlige primært vil kommunikere digitalt?

2. Breaking encryption by law

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Instant messaging services and emails are being used for sharring illegal materials (e.g. child-pornograph). It is currently impossible to detect this misuse because the service providers end-2-end encrypt messages.

Politicians propose that service providers should build in “backdoors” in their encryption such that they can scan for illicit materials, or so that authorities at least can get a court-order and force open materials that they suspect are illegal.

Opponents of the proposal says it is a fundamental breach of law-abiding peoples privacy and compares the proposal with George Orwells 1984. Proponents argues that the cause (catching criminals) necessitates breaching peoples privacy, and claims the proposal is no different than old-school wiretaps.

Are the proponents right? Should we surrender some privacy, or are the opponents right that it would be one step towards a big-brother society? Are there any technical solutions that could help?

3. Digital Overload and Mental Health

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In the last decade, digital technologies have become an inseparable part of our daily routines. Smartphones, laptops, and constant internet connectivity mean that we are always “on,” always reachable, and always expected to respond. Work emails arrive late in the evening, group chats ping us at night, and social media platforms push endless

streams of curated content. While this connectivity offers flexibility and opportunities, it also creates a constant pressure of availability and an overload of information.

What does this mean for our mental health? Studies show that digital overload can lead to stress, anxiety, and difficulty in maintaining focus. Notifications fragment our attention and make it harder to disconnect. At the same time, young people in particular are growing up in an environment where online presence is tied to identity and social belonging. How do we balance the benefits of digital connectivity with the risks of overexposure?

Should schools or workplaces establish “digital curfews” to protect mental well-being? How can technology itself help us manage overload, perhaps through smarter notification systems or mindful design? And what role does individual responsibility play—should we be expected to set our own boundaries, or should society at large take steps to regulate the digital pace of life?

4. Digital Technology and the Climate Crisis

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The climate crisis is one of the greatest challenges of our time. At the same time, we are witnessing an explosion in digital technologies: cloud computing, artificial intelligence, and the massive use of data centers to power our online lives. These technologies promise solutions to climate change—better prediction models, smart energy grids, optimized transport systems—but they also come with a hidden cost. Training a large AI model, for example, can emit as much CO₂ as several cars over their entire lifetimes.

This raises critical questions: Is digital technology a net positive or negative for the climate? How do we balance the energy costs of new technologies with their potential to mitigate climate change? Should governments regulate the energy consumption of data centers and tech companies, just as they regulate traditional industries? And what about individual responsibility—do we, as users, have an obligation to reduce our own digital footprint?

How can society ensure that the digital revolution becomes part of the climate solution, rather than part of the problem?

5. Digital Wellbeing and Social Media

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Social media platforms such as TikTok, Instagram, Snapchat, and YouTube have become an integral part of everyday life, especially among young people. These platforms are designed to maximize user engagement, using techniques like infinite scrolling, push notifications, and personalized content feeds. While this makes them attractive and fun, it also raises important questions about digital wellbeing. Excessive use can lead to reduced productivity, disrupted sleep, stress, and even negative effects on mental health. At the same time, social media has undeniable benefits: it connects people, enables self-expression, and provides entertainment and learning opportunities. The challenge lies in finding the balance between healthy use and overuse. How can users

be made more aware of their own digital habits? Should platform providers take responsibility for designing more “wellbeing-friendly” interfaces, or is it solely the user’s responsibility to regulate usage?

6. Green Computing - Energy and E-Waste

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Digital technology powers almost every aspect of modern life, but this convenience comes at a cost. Data centers consume massive amounts of electricity, our devices constantly draw power, and millions of discarded smartphones, laptops, and other electronics end up as electronic waste (e-waste) each year. E-waste contains valuable materials but also toxic substances that harm the environment if not recycled properly. At the same time, many users are unaware of how their digital habits — like streaming video in high resolution, keeping dozens of apps running in the background, or frequently upgrading devices contribute to higher energy usage and faster obsolescence. This raises important questions: How much energy do our digital devices and services actually consume? What can individuals, companies, or governments do to reduce the environmental footprint of IT? Should software developers be more responsible for writing “energy-efficient” code? And how can awareness about e-waste be increased so that users and producers alike make more sustainable choices?

7. Anonymity in the World of Tracking

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In today’s world, data is one of the valuable commodities, and you have probably heard “if you are not paying for the product, then you are the product”. And it is true. One minute you are talking about buying a new phone, and the next you are being flooded with ads about the newest iPhone. Most people will think they are being bugged, but in reality, it is caused by the massive amounts of data being collected behind the scenes. The data is collected without us knowing or even thinking about it. Even when you refuse cookies, there is still information to be learned from this behaviour, allowing the internet to know you better than your own parents. Dating apps like Tinder and Grindr are a striking example, through which the proximity indicators have been used to locate people’s workplace and home locations. It is unsettling, especially since location sharing has become so common that we do hardly think about it anymore. But what can we do about it? Is it acceptable that we are constantly tracked and profiled? Should we be turning to special privacy-by-design browsers and anti-tracking? And is our data really as valuable as companies claim, or are we overestimating its importance? Is my anonymity actually that important?

8. LLMs surpassing existing technology

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The emergence of large language models (LLMs) has brought about huge changes to

how people obtain information and knowledge. LLMs seem powerful at providing answers to whatever kinds of questions posed by users. As a particular type of application of LLMs, we can ask them spatial questions such as 1) What are the hotels within 3 kilometers from Tivoli? 2) What is the S-tog station nearest to AAU CPH campus? 3) What is the shortest path from AAU CPH to Tivoli that passes through the fewest traffic lights? Such questions traditionally are resolved by spatial databases and/or geographic information systems, which however are only accessible to professionals through specialized interfaces. Therefore, it is interesting to know whether typical LLMs can provide correct answers to such spatial questions, or how well they are at answering such questions.

9. The Illusion of Reality: Understanding and Addressing Digital (Mis)Information

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In today's AI era, Information is disseminated at a never-before-seen rate via social media, news sources, and online forums. While this continuous flow of information enables global linkages and democratises information access, it also fosters the spread of false information. Fake news—false or misleading information presented as factual reporting has grown to be a significant problem. For example, during the COVID-19 epidemic, false information about "miracle cures" or conspiracy theories around vaccines spread rapidly and had a direct influence on public health decisions. Similarly, polarising society, influencing elections, and undermining confidence in democratic institutions have all been accomplished through politically driven disinformation. The causes of fake news are diverse. Some are deliberately designed by individuals or groups with political, financial, or ideological interests while others are output of poorly researched journalism, satires mistaken for facts, or the viral spread of rumours without corroboration. The speed and extent of dissemination are often enhanced by social media algorithms designed to prioritize engagement, thus sensational or emotionally charged content receives more visibility regardless of its truthfulness. Moreover, the advent of Generative AI and Large Language Models (LLMs) has introduced a new dimension to the problem. Such systems can generate realistic human-like text at scale, which can be used to produce fake news articles, automated propaganda, phishing emails, or manufactured social media posts. Unlike traditional fake news, LLMs can generate endless streams of plausible content in seconds. This makes it increasingly difficult for readers to distinguish between human-written and machine-generated information. Along with text-based disinformation, the rapid development of AI has enabled the rise of deepfakes: highly realistic but artificially generated or manipulated audio, video, and images. These are often created using Generative Adversarial Networks (GANs) or other machine learning (ML) algorithms, which can replicate voices, faces, and gestures with uncanny accuracy. Collectively, fake news, deepfakes, and LLM-generated text blur the distinction between fact and fiction in the online world. This results in dangerous consequences for societies worldwide, as disinformation spreads faster than fact-checking and, once lost, trust is extremely difficult to restore. How can we reliably distinguish between authentic and manipulated/generated content? Can AI/ML help

to mitigate?