



Experimental Techno-Humanities & Organisational Services

Junior Researcher Programme

Project Flipbook 2016~2023



Emilie Mørch Groth

Accountability and Transparency: Data collection on the Danish Signature Projects JR in 2022-2023

Driven by an interest in public use of data and AI, I set out to map the Danish Signature Projects. These projects are funded by the National Uptake Fund by the Danish State, and are deployed in municipalities and regions nationwide, experimenting with and improving the use of AI in different public sectors. My focus became the many partners involved in the projects, as I see accountability as dependent on stakeholders involved in the data work. But the mapping exercise was quickly interrupted by a lack of available information on the project partners, and this lack of transparency pivoted the projects. The lack of information and the murky landscape have proved to be a persistent obstacle, and with my project, I aim to improve the transparency by shedding light on accountability through what information I can and cannot obtain on the Signature Projects.



Louie Meyer

Investigating the Gender Gap in STEM through the lens of Data Feminism principles $$\rm JR$$ in 2022-2023

As a gender queer student in the field of computer science, I often wonder what constitutes the significant gender gap in Science, Technology, Engineering and Mathematics (STEM). Even more so, I wonder why the gap is continuously narrated as a binary distinction.

Through this project, I aspire to create awareness of the gender gap in STEM and the missing representation of gender minorities. During my process, I explore potential ways to challenge the status quo, particularly focusing on speculative data visualizations. The project is inspired and informed by the Data Feminism principles and draws on methods from critical and speculative design.



Chris Aftzidis & Pau Victoria Menshikoff

Brilliance Bias: Differences in gender perception at ITU JRs in 2022-2023

Our project idea sprung from our own frustrations with the male-centeredness in academia and how brilliance is a trait seemingly exclusive to men. Initially, we wanted to investigate academic papers and whether there are visible patterns in the citations, e.g. do men tend to cite men. That idea eventually evolved into analysing course evaluations. We hoped to be able to gain an understanding of brilliance bias and what it affects, both generally and at ITU. Ultimately, we stopped our project after running into some issues with GDPR and realising that it was not possible to complete within the given timeframe.



Tristan Vonet

On Spotify's recommender systems JR in 2022-2023

My research is driven by a strong motivation to understand the intricate dynamics of the music industry, a complex entity I have immersed myself in since 2020. My aim is to shine a light on the use of recommender systems, how they can perpetuate certain forms of negative bias, particularly gender bias, evident in the alarming lack of female artists among the most streamed musicians globally and in Denmark. Eventually, I hope to become an expert in this field and help develop new solutions that can reduce the harm and injustices that can be brought forth by recommender systems.



Ahmet Akkoc

Secrecy Sells: Understanding Consumer Perspectives in the Privacy Market JR in 2022-2023

Has privacy become a luxury? This is an independent research project on the consumer interpretation of privacy and privacy as a commodity. Mass data collection and surveillance has generated serious interest in privacy. From there have emerged a variety of artifacts and products built around privacy. I conducted interviews with 8 students from Danish universities to better understand online privacy habits, and what technologies or commodities enable or promote them. I conclude on the implications of re-contextualising privacy commodification as using a paid or bundled service to improve one's privacy, rather than the traditional understanding of trading privacy for utility.

Hanna W. Grue Tech Policies in Public Schools and Problem Representations JR in 2021-2022 • <u>hanna@grue.eu</u>



My project has sprung from my frustration over tech use and policies in public schools and my believe that (the lack of) these policies have a negative effect on the pupils, the teachers, the learning environments, the relations between children, parents and more. I therefore want to dig deeper into the discussions and controversies behind tech policies in public schools around Denmark. My take off will be to look at selected, existing regulations found on public schools' websites, based on Carol Bacchi's argument that rules emerge in response to perceived problems. By exploring the representation of these problems in current regulations, I hope to be able to map some of the controversies regarding technology use in public schools.



Isabelle Engelke Living in a Virtual State: Estonia's Digital Society JR in 2021-2022 • <u>engelke.isa@gmail.com</u>

As one of the most digitally progressive states in the world, Estonia has, as part of a digitalization initiative called 'e-Residency', started an attempt to expand their society digitally and thus build a 'virtual state'. The e-Residency program was launched in 2014 with the intention to attract international businesses and talent to Estonia and has since acquired over 84,000 virtual citizens. My project aims to investigate how e-residents experience and perceive being residents of a 'virtual state' and what socio-technical imaginaries are tied to the program both from the perspective of Estonian e-residents as well as the Estonian state authorities.

Teresa Bundgård Limitations, Gatekeeping and Community – Experiences of Women Entering the Crypto-Community JR in 2021-2022 • teresabundgaard@gmail.com



When talking about gender equality, personal finances are vital. Therefore, when a whole new type of currency – such as cryptocurrency – is created, it is important to look at how gender plays a role in who gets access, has information on how to use it and ultimately, how these factors shape our society. Through both qualitative and quantitative methods, I will look into the experiences of female professionals on LinkedIn, and study which possible limitations and gatekeeping there exists when seeking to enter the crypto-community. Through the research, I also hope to gain an understanding of how the methods used affect the findings and ultimately, understand if there is a difference in which stories are told through quantitative and qualitative data, respectively.



David Søbæk Olsen

Social Media Platform Governance JR in 2021-2022 • email

Social media platforms are a part of the global conversation and as more people start to engage on these platforms it becomes a prudent area to research and understand how such platforms are shaping a new form of institutional landscape. To address this, I am researching the 2021 Australian Facebook News Ban by exploring what events led to the eventual news lockdown. To investigate this topic, I will be analyzing the primary stakeholders, the Australian government, Australian media, and Facebook and compare their assessment of the news ban event up against each other. Who won the first round of negotiations? And how do they discuss the idea of success versus failure? Using Australia as an example, I'd like to discuss social media platform governance and the role it already plays and might play in the future.



Jasmin Katharina Shokoui Understanding Forms of Mindful Digital Technology Use Intern and JR in 2021 • jasmin.shokoui@tum.de

Do you know the tedious feeling of regularly spending too much time on your phone or computer? Do you know someone who tries to restrict their time spent on digital devices? Have you heard about a friend deleting their social media apps from time to time or deciding to keep their phones out of their bedroom? Lately, terms like digital detox or digital self-care have been part of many conversations. This research project asks how we can understand these phenomena. Are they individualized responses to a systemic problem? How does class interfere with these practices? And on which socio-technical imaginaries is the notion of mindful digital technology use based?

Blogposts:

- Digital detox and self-care: Individualised responsibility as an answer to a structural dilemma?
- The Limits of Conducting Ethnographical Research

Georgios Natsios

Where is Ethos in Al Ethics? JR in 2021 • georgenatsios@hotmail.com



Globally, the problematization of the utilities and the unrestricted development of Artificial Intelligence is becoming more intense. Bias in algorithms, misuses of the technology, disinformation, exclusion of certain groups are a few of the examples that Artificial Intelligence has provoked the last few years. However, Artificial Intelligence is a technological development that may create various benefits for humanity and the environment, in various sectors such as medicine, the future of work, and sustainable development, among others. My project emphasizing the importance of precautions in the process and the essentiality of the ethical development of AI applications.

Blogpost:

• Where is "Ethos" in AI ethics?



Luis Landa Sustainable Computing Environments and DIY Solutions JR in 2020-2021 • landa.luis@me.com

This project focused on the intersection of ecology and technology. Taking the internet and how it tends to be conceived in the general imaginary as the focus. The whole IT process behind setting up a server, assembling a power unit, developing a backend and front-end for a website is put through an ecological lens. The blogposts relate to the journey of getting hands-on with the materiality of digital technology, renewable energy and sustainable design. This includes links to resources for creating your own DIY sustainable computing environment. Additionally, the actual server and power module are present in the lab which will hopefully serve as a space for those wanting to explore a more low-tech and environmentally friendly IT setting.

Blogposts:

- <u>Ecological thought and digital technology</u>
- The adventures of DIY sustainable computing

Rikke Haslund Jønsson Learning Styles Within Universities JR in 2020-2021 • <u>rikkejoensson1@hotmail.com</u>



On a higher level of education we are told, that we are more responsible for our own learning than ever before, but few learn how to learn based on their own ideal learning method. "Classic blackboard teaching" works for certain people, but might not be ideal for everyone, and therefore not everyone reaches their full potential. My research project will look into how we can optimize this process, with a focus on individual learning. And finally creating a perspective for how one can improve the language learning process, which can be very individual and outdated. This is going to include several smaller and more limited research projects, starting with a look into some of the newer learning methods in use at ITU, such as Python Study group or the NavCom Radio.

Blogposts:

- <u>Understanding more sides to individual learning</u>
- Finding direction: Scoping a project with many possible routes



Casper Frohn Digitalized Agenda-Setting: Power Through Hashtags JR in 2020-2021 • casper.frohn@gmail.com

Being interested in how social media couples with democracy and agenda-setting, I decided to explore the role of hashtags in activism. After having conducted a concept mapping workshop in ETHOS Lab, I ended up developing an understanding of activism as encompassing causes, actions, and organization. I then outlined hashtags as mobilizing actor-networks, however also as entailing both enabling and constraining power dynamics. I discussed how some of these dynamics present themselves through potentials of (mis)alignment across social actors, as well as through the programmed prioritization and curation of algorithms. My project led me to inquire into the clash of democratic agenda-setting practices with online platforms governed by private and profit-seeking corporations – ultimately making me ask the question: who are (dis)empowered through hashtags?

Blogposts:

- <u>Power through hashtags: Investigating hashtags in activism</u>
- Power through hashtags part II: (Dis)empowered by hashtags?

Benedict Lang

Perception of Technologies Within Hackathons Intern and JR in 2020 • <u>benedict.lang@posteo.de</u>

Hackathons are getting a more and more popular event format to work on societal challenges and come up with solutions. This project aims to understand how people perceive technology as a means to solve societal challenges



and to understand why technology is chosen over other possible measures. The hackathon "#wirvsvirus" that was conducted by the German federal government to fight the COVID-19 pandemic will be used as an empirical subject. Therefore, several interviews with participants were conducted to make sense of the dataccollected along with the hackathon like descriptions of challenges and project descriptions. I focused on the "solution enabler" program, which was launched by the federal government after the event itself to support evolved projects on their way to become sustainable products and solutions.

Blogpost:

• What is a research sprint?



Kristoffer Kloch Podcast as a Method in Knowledge Production JR in 2019-2020

Podcast as method in knowledge production: Is there a 'great divide' (Turnbull) between researchers' publications and the reach of non-academics? Aaron Schwartz acted on the notion that there were institutional and political barriers keeping the public from accessing state-of-the-art research from universities and thus excluding them from intellectual debates. This project explored research dissemination both as a topic but also as a method. It asked the research question: can podcasting break down existing barriers and how does this format contribute differently than the format of writing and how? Through this, I looked at what one can do with the spoken word that one cannot do with the written. And oppositely, what will you miss in the spoken method compared to the written method?

Blogpost:

• Podcast as a method in knowledge production

Amalie Blixt From Data Subject to Decision-Making IR in 2019-2020



By the internet, scholars, managers, and acquaintances, we are told that this is the age of algorithms, of machine learning, of big data. Thus, from January to June 2020, I immersed myself into an ethnographic study of an algorithm integrated into a large financial company to assist operational decision processes. What I gained from this study was a real-life confirmation of Tricia Wang's statement that "big data needs thick data". However, this opinion was not widely shared in a business environment dominated by *numbers*. Inspired by actor-network theory, situational analysis, and critical algorithm studies, I took on a qualitative approach to look into the social tensions surrounding this algorithm, which were not visible through traditional project management methods and quantification.

Blogpost:

Businesses oblivious to their need for ethnographic enquiry



Viktoriya Feshak Technologies of Mobility: The Construction of Inclusion Within New Copenhagen Metro Line IR in 2019-2020

A project on how principles of inclusion, embedded into welfare architectural policies, are mirrored in the newly designed metro system in Copenhagen focusing on how technical, infrastructural configurations are imagined to make disabled people "mobile"/"capable". Using the case-study of the metro ring, two concepts will frame the inquiry: participatory design and techno-architectural assemblages and citizenship. Before dwelling on the materiality of the space, I elaborated the questions: how do the concepts "accessibility", "inclusion", or "universality" manifest in Danish discourse around architecture, and to what extent was the design of Cityringen participatory, comparing with its original definition?

Blogpost:

• Metro for (almost) everybody

Marianna Kozányiová Exploration of IT Consultancy Practices IR in 2019-2020



IT Consultancy is becoming a crucial discipline in Nordic countries within both private and public sector having a great influence over digital landscapes ingrained within our everyday lives. It is being constantly accelerated by the emergence of new technologies, which subsequently expand the demand and the market. It is therefore inevitable to explore and understand IT Consultancy practices through an STS lens, in order to comprehend their influence on digital and organizational landscapes. How did IT consultancy practices developed over time and in what organizational structures are these embedded in now? How can we understand these structures through exploration of systems, processes, standards, definitions, documents and data? What are the future remarks for IT Consultancy research?

Blogpost:

Navigating qualitative research in a data-driven world



Thea Schytt Meineche Field Notes From an Echo Chamber JR in 2019-2020 •

Prompting questions of data sources, understandings of objectivity, power relations, and possible even surveillance, this project takes an offset in a company specializing in offering analysis of social media data for political work. The notion of data-driven decisions influences political work given that the introduction of data and metrics in other businesses such as marketing and communication has been based on the idea of improving accuracy and performance. But what happens when the starting point is the opinions of voters or members of an organization? What role do data and metrics then take on?

Blogpost:

• Field notes from an echo chamber



Nanna Louise Haagen, Rebecca Hoeck, Clara Stage Langgaard Mandatory State Digitization in Greenland

JRs in 2019-2020

We set out to investigate the implementation in April 2020 of digital mail in Greenland and the implications of this mandatory digitization initiative. Our project had two focus areas. The first being state digitization seen in a historical and post-colonial frame, and the second being the concrete case of digital mail focusing on the end-users; the Greenlandic citizens. Furthermore, we were curious about the reasons for why the Greenlandic digital solution is identical to the one that was implemented in Denmark. The three core themes this thesis interrogated were post-colonial legacy, state digitization's rationale of 'one size fits all' and how distinct groups of citizens are incorporated in the implementation and development of digitization tools. The project contributed to further understanding of state digitization and the impact on citizens' everyday life in Greenland.

Blogpost:

• Doing STS in a postcolonial field



Patricia Namakula Mbabazi

Immigration and Digitalization JR in 2019-2020

How is the design of public information systems shaping the interaction between newly appointed citizenships and authorities in the societal context of integration and immigration? How is the digitization service enacting classifications, ethics and politics through computational design and judgement?

Caroline Thomsen Geographic Analysis and Prediction of Epidemics JR in 2019



This thesis looked to address how data analysis and geographic information systems can be used to track and predict epidemics, with a focus on the Ebola epidemic in West Africa. With the use of data, especially when collected under time pressure, the importance of data reliability and validity follows. This is why we have to discuss and understand how culture, demography and politics affect the outcomes of geographic analysis – and how we can close these data gaps.



leva Jasaityte Neuropsychology and Artificial Intelligence JR in 2019

The thesis related to deep learning techniques, striving to combine knowledge in human and artificial intelligence. At ETHOS lab, I executed research of Neural Networks via cognitive psychology. I analyzed the complexity of AI decision making processes, and introduced the explanations based on parallels between concepts of AI and processes of cognitive psychology and discussed ethical questions.

Joe Massey Wikipedia and the Production of Knowledge IR in 2019



Wikipedia is the largest source of information ever collected and has huge influence around the globe, which enables certain narratives to control historical knowledge through language and culture. Using Wikipedia data, this project investigated who are writing articles, in what languages and from where in the world. In a complementary qualitative analysis, I tried to understand how the idea of Wikipedia may not fit the many types of diverse knowledge which exist around the world.



Josefine Andersen

Materializing Absence in Ethnography IR in 2019

My project concerned the methodological challenge within ethnography of accessing and investigating groups in society that are "hard to reach", exploring the possibilities of materializing absence. The inspiration came from my fieldwork in Costa Rica, where girls often go under the diagnostical radar. Since this group appears absent in a clinical and societal setting, I also investigated how the group comes to be in other spaces than those immediately accessible to the ethnographer.

Lauge Groes Creativity and Artificial Intelligence JR in 2019

I investigated creativity in relation to AI by asking the question: Can creativity be fostered by artificial means? For this, I conducted interviews with different types of artists.



Furthermore, I did an auto-ethnographic study where I implemented two types of deep learning art producing frameworks: a poetry and painting generator. The thesis was essayistic and experimental in nature, influenced by a variety of philosophers, artists, and scientists.

Stefan Wachmann

Identifying Hate Speech on Social Media IR in 2018-2019



How is it possible to mitigate the problem of hate speech on social media when the sheer amount is too large to go through manually? One approach is automated text classification. My project attempted to do exactly that – to detect hate speech on Danish social media through deep learning methods. The main challenges were the lack of Danish data sets, the ambiguity of text, and the subjectivity of definitions and annotations.



Vanderléia Dionízio

The Principle of the Will in a Cookie Society JR in 2018-2019

We live in a cookie society. Not in a cookie dough or in a cookie crazy one. But in a society where cookies must be accepted in order for you to access internet pages. By clicking those cookies, you are signing a contract that you most likely did not read, probably for lack of time or legal knowledge. This project intended to build a tool that can do some of that job for you.

David Avellar Implications of Big Data in Telemedicine JR in 2018-2019



I researched the process of monitoring patients in a certain region, and what the results and consequences of the application of telemedicine are. There are several telemedicine projects running in Denmark, and these use different technologies as IoT, wearables and video calls to optimize patient treatment. The project looked into how diagnoses analyses compare to real life doctors' observations, and how data visualization of a patient population is influencing prioritization of emergency cases.



Sophia Knopf Neuroscience and Al JR in 2018-2019

My project is located at the intersection of neuroscience and AI, focusing on the Turing Test as practice that mediates between ideas of human intelligence and behavior, and its artificial counterpart. By researching the controversy around Google Duplex, as observable in the media, the project explored the test's mythological meaning, its underlying principles and its status in light of contemporary contributions to assess artificial intelligence.

Benedikte Randløv

Critical Design and Welfare Technology JR in 2018-2019



This small research project took on a critical design approach

to the design of welfare technology for vulnerable older people, asking what if welfare technologies did more than compensate for lost abilities, and instead provided new and enjoyable superpowers? Based on interviews with Mette, an 82-year-old woman, the project revolved around the design of an artefact/environment that enable her superpowers. The main design material was computational textile.



Cristina Canureci The Social Construction of Cryptocurrency

JR in 2018-2019

The power and trust relations of the cryptocurrency market.

I researched how social interactions and crowd sentiment influence the movements of the crypto markets by taking a case study approach of RippleNet and XRPP centralized cryptocurrency. The aim of the project was to showcase the social construction of cryptocurrency by analyzing the discourse of power actors and to develop new types of data sources for understanding the market.

Michela Seresini Conversational Interfaces and Smart Speakers IR in 2018-2019



I wrote my master thesis on the topic of conversational interfaces and smart speakers, their integration in the domestic environment from a sociological point of view. Through two empirical analyses, the aim was to study how they fit in the family's routine and their usability from the users' perspective. The theoretical framework was composed by the domestication theory and the walkthrough method.



Cæcilie Laursen Exploring minsundhedsplatform.dk JR in 2018

My thesis explored the possibilities of the patient portal, *minsundhedsplatform.dk*. The project was an ethnographic study at a hospital department in the Copenhagen region, drawing on participatory observations of staff practices and interviews with ambulant patients.

Jasper van Veen Blockchain, Sensors and Carbon Emissions IR in 2018



I wrote my thesis on how blockchain can connect sensors to monitor and report carbon emissions from ships. The question being prompted by new Eu legislation laws. The project considered the governance of a system in which the data is designed to be forever persistent and immutable. The project proposed an IoT-sensor taking the environment and data computation into account.



Lisa Denzer Social Robots JR in 2018

My thesis was on the topic of social robots. How an by whom are they assessed, measured and made accountable for their impact on society? Specifically, the project explored the relationship of social robots in roles of social care – e.g., their ability to help elderly people, disabled and children.

Lukas Klafke Beck, Jesper Henrichsen Neural Networks and Image Recognition in Protests JRs in 2017-2018



We wrote our Master's thesis together. Working with two different image data sets from protests, we used a neural network to recognize if the images depict violence. Besides the technical aspects we were also engaged in the potential ethical implications of such image recognition.



Mirela Sandu Digital Labor and Classifications JR in 2017-2018

As a pilot project for my Master's thesis I explored the theme of Digital Labor. I asked how new forms of data are used as a basis for decision-making? My focus was on how user classifications can be based on interests rather than demographics.

Silja Vase Speech Recognition Technology in Denmark JR in 2017-2018



In my project I was interested in exploring the use of speech recognition technology (SRT) in Denmark. I specifically explored how speech recognition technology can be used as a medium to create collaborative citizen logs with the municipalities during meetings.



Alona Shevchuk, Anastasija Jakovleva Technological Mediation in Gambling JRs in 2017-2018

Our project was a qualitative study of the relationships between gambling providers and users from a user perspective. We investigated the role of technological mediation, specifically mobile phones and gambling apps like OpenBet (provided by Danske Spil), the ease of access and the availability of these technologies.

Mette Størup Blockchain in the Danish Energy Sector JR in 2017-2018



I wrote my thesis on the theme of blockchain in the context of the Danish energy sector. I used theory building to explore user adaption of blockchain technology.



Niels Helsø, Per Nagbøl and Benjamin Olsen Machine Learning and Financial Statement Classifications JRs in 2017-2018

We wrote our Master's thesis together. We explored whether financial statements from Danish companies report in accordance with the Financial Statements Act on the underrepresented gender (§99B). Using text mining/machine learning techniques (e.g., LDA, doc2vec, word2vec) to analyze content of the annual reports, focus was on the issues arising from the automated reading of such reports in relation to decision-making.



Dana Marie Yu Categories in Personal Data Analysis and Algorithms IR in 2017

My project was related to the SDT design track. I was interested in the training of algorithms. I asked the question: can algorithms be less biased? Through my project, I investigated existing categories pervading personal data analysis collected by giant tech companies like Google and Facebook through software. How do these categories directly or indirectly impact the training of the algorithms in machine learning?

Stefania Santagati The Role of Trust in Al-Human-Interaction

IR in 2017

My project involved ethnographic experimentation with an AI artefact. The goal was to explore how humans interact with AI and make ethical choices based on particular scenarios. The





Viktor Hargitai Anonymizing Datasets to Protect Data Subjects and Preserve Analytical Value JR in 2016-17

My project was part of my Bachelor's project. I investigated the complexities of how and why particular data is anonymized and made available for analysis. I asked what is regarded as anonymous data? And I examined various cultural, ethical, financial, and technical factors.

Benjamin Hervit Inherent Politics in Public Data IR in 2016



I wrote a blog post where I discussed the politics of the Danish Financial Act database. My starting point was Jesper Heinrichsens's visualization of the Danish Finance Act for 2017.



Adam Pantkowski

Electricity Map JR in 2016

I worked on increasing the user friendliness of the open-source project *Electricity Map*. I made a survey that was added to the interface of the electricity map. In addition, I put my country of origin, Poland, on the map.

Tali Melchior Gender Distribution at ITU JR in 2016



I investigated the gender distribution at the IT University. I created an overview of undergraduate and graduate programs since 1999 and looked to include different staff positions as well. My motivation was the issue of lack of women in tech.



Minna Jensen

Making Data Visualizations Understandable for the Average Citizen JR in 2016

I worked on increasing the user friendliness of the open-source project *Electricity Map*. I made a survey that was added to the interface of the electricity map. In addition, I interviewed issue experts about the map and about data visualizations in general.

Tiemo Thiess Facebook's News Feed Algorithm JR in 2016



I studied Facebook's news feed algorithm with a grounded theory approach. I did so by reading and categorizing 35 press releases from Facebook about the improvements and the changes they have made to the news feed.