GERMANS SAVCISENS

Ph.D. Fellow in Computational Social Science

Copenhagen, Denmark | germans.savcisens@pm.me | LinkedIn | Personal Page

PROFILE

Third-year Ph.D. Student in Computational Social Sciences. Background analyzing massive datasets and developing machine learning methods for modeling unstructured longitudinal data. I am skilled in data processing & mining, visualization of complex datasets, and algorithmic auditing. My areas of interest include Natural Language Processing, Foundation Models, Deep Learning, Predictive Analysis, Computational Social Sciences, and Algorithmic Ethics & Safety.

WORK EXPERIENCE

PhD Student | Technical University of Denmark & University of Copenhagen   Sep 20 — Present
I am using nationwide social-economic & health data to predict life outcomes by applying transformer-based neural networks.
- Applied deep learning for the life-outcomes prediction, evaluated and interpreted outputs of neural models.
- Developed and implemented machine learning models for representation learning,
- Focus on Algorithmic Auditing and Fairness.

Guest Researcher | Denmark Statistics   Sep 20 — Present
Affiliated with the Data Science Lab as a part of my Ph.D. Research:
- Mined & processed large-scale behavioral datasets for exploratory & predictive analysis.
- Collaborated with Denmark's leading economists & social scientists to identify demographic patterns.

Visiting PhD Student | Network Science Institute (Northeastern University)   Sep 22 — Feb 23
- I visited RADLAB to work on a project within Algorithmic Auditing and Fairness.

Global Data Science Researcher | Novo Nordisk   Sep 19 — Apr 20
Conducted research with the Data Science department on predictive modeling for medical adherence:
- Worked with IT, engineering, and product managers to extract valuable business insights.
- Developed hierarchical attention models for the health-outcome predictions.
- Deployed the model to leverage behavioral data affecting key business areas.

Global IT Infrastructure Assistant | Novo Nordisk   May 17 — Sep 19
- Enhanced data collection procedures, assisted in automating data processing challenges
- Built reporting dashboards and provided ad-hoc analysis and visualization of various reports.

EDUCATION

Aalto University | Helsinki, Finland   Feb 21 – Jun 21
Visiting Student for Digital Ethics and Statistical Natural Language Processing

Technical University of Denmark | Copenhagen, Denmark   Feb 18 – May 20
MSc in Human-Centred Artificial Intelligence

Technical University of Denmark | Copenhagen, Denmark   Sep 17 – Jan 18
Pre-Masters (Statistics and Advanced Engineering Mathematics)

Aalborg University | Copenhagen, Denmark   Sep 13 – Jul 16
BSc in Human-Computer Interaction

SKILLS

Hard Skills:
- Time-series analysis
- Algorithmic Fairness and Bias
- Robustness of ML Models
- Machine Learning
- Natural Language Processing
- Fundamental Models
- Data Processing and Visualization
- Network Analysis
- Design of Experiment

Languages:
- Russian (native)
- English (fluent)

Coding languages:
- Python (advanced)
- SQL (advanced)
- C# (proficient)

Tools:
- PyTorch (+ Lightning)
- Pandas (+ Dask)
- Scikit,
- NetworkX
- Flask
- Bokeh & Seaborn
- HuggingFace

PUBLICATIONS (PRERPINT)

[Using Sequences of Life-events to Predict Human Lives](#)
Germans Savcisens, Tina Eliassi-Rad, Lars Kai Hansen, Laust Mortensen, Lau Lilleholt, Anna Rogers, Ingo Zettler, Sune Lehmann
Nature Computational Science

[A Sustainable West? Analyzing Clusters of Public Opinion in Sustainability Western Discourses in a Collection of Multilingual Newspapers (1999-2018)](#)
Elena Fernández Fernández, Germans Savcisens
Proceedings of Digital Humanities in the Nordic and Baltic Countries

ACADEMIC TALKS

"Danish Registry Data and Socio-Economic Trajectories" MIT, Human Dynamics Lab | Boston, US	Oct 22
"Life2vec: What Transformers can learn about us from the government statistics," Centre for Social Data Science | Copenhagen, Denmark	Nov 21
"Representation of Behavior with Transformers: Beyond NLP" Centre for Basic Machine Learning in Life Science (MLLS) | Copenhagen, Denmark	Nov 21
"Representation of Human Behavior" Statistics Denmark (Nation-scale Social Networks) | Copenhagen, Denmark	Sep 21

TEACHING

Principal Lecturer

Algorithmic Fairness, Accountability, and Ethics | IT University of Copenhagen	Jan 23 — Jun 23

Teaching Assistant / Assistant Lecturer

As a Teaching Assistant or Assistant Lecturer, I navigate students with their assignments and projects, as well as develop course content and measure student's final performance:

Algorithmic Fairness, Accountability, and Ethics | IT University of Copenhagen	Jan 22 — May 22
Advanced Machine Learning| Technical University of Denmark	Jan 21 — Jun 21
Social Data Analysis and Visualizations | Technical University of Denmark	Feb 19 — May 21
Social Networks and Interactions | Technical University of Denmark	Sep 19 — Dec 20

GRANTS

Villum Foundation: Villum Synergy (Sponsor for PhD Studies) | Denmark	2020-2023
Otto Mønsted Fond (Travel Grant) | Denmark	2022
STIBO Foundation (Travel Grant) | Denmark	2022
William Demant Fonden (Travel Grant) | Denmark	2022