



JACOB AARUP DALSGAARD

COMPUTATIONAL SOCIAL SCIENCE

RESEARCHER MOTIVATED BY SOCIAL EQUALITY

I am very interested in the study of social and cultural dynamics. I believe that by describing and understanding these we can develop new tools that can help us correct behaviors and biases that create inequality. My research will thus greatly expand our understanding of behavior in complex social interactions.

I have involved myself heavily in building NLP resources, being a contributor to the [Danish Gigaword project](#) and the co-creator of the [sentiment lexicon Sentida](#). I have used these resources to study how pragmatics of conversational backchanneling shape interpersonal alignment. In my start-up, I investigated the potential for algorithms to monitor interactions on social media. Finally, I am deeply passionate about social sustainability having entered several competition with case-winning ideas, including scraping public reviews of attractions to model patterns in tourism for the [national Danish tourism agency](#) and building classifiers to detect abuses of cognitive biases related to [phishing emails for the Danish Business Authority](#).

COMPETITIONS

- [AU CHALLENGE](#) - WINNER
Aarhus University x [VisitDenmark](#)
- [CYBERSECURITY CHALLENGE](#) - WINNER
[Erhvervsstyrelsen](#)
- [AU SME CHALLENGE](#) - WINNER
Aarhus University x [myhouse](#)

CONTACT INFO

Phone | +4542199551
Email | jacdals@hotmail.com
Website | <https://jacdals.com/>
<https://scholar.google.com/citations?user=2GMbqY0AAAAJ&hl=da>



PROFESSIONAL EXPERIENCE

[2018-2019]

[2023-]

Aarhus University
ITU Copenhagen
University of
Copenhagen

[2021-2023]

KMD A/S

[2020-22]

ValueFromText APS

[2020-21]

Systematic A/S

RESEARCH / TEACHING ASSISTANT

- Preprocessing, anonymization of Danish text for Gigaword Project
- Teaching Data Science in Production
- Teaching Advanced Social Data Science II
- Social contagion of smartphones

STUDENT DATA SCIENTIST

- Developing REST API for downstream NLP tasks
- Maintaining models in production

CO-FOUNDER

- Outreach and fundraising
- Dataset creation and annotation

JUNIOR CONSULTANT / ANALYST

- Product quality and process improvement models
- Creating pipelines for statistical analyses



EDUCATION

[2021-2023]

IT University of
Copenhagen &
Universitat Politècnica
de Catalunya

[2018-2021]

Aarhus University

DATA SCIENCE

Master's degree

- Algorithm Design & Deep Learning
- Recommender Systems and Information Retrieval
- High Performance Computing
- Network Science and Graph Neural Networks
- Thesis on data augmentation with LLMs

COGNITIVE SCIENCE

Bachelor's degree

- Computational modelling and Bayesian statistics
- Agent-based model on diversity and performance
- Transformers vs linguistically motivated features
- Electives in Python, calculus & linear algebra



ACADEMIC ACHIEVEMENTS

PUBLICATIONS (PEER-REVIEWED)

- [SENTIDA: A New Tool for Sentiment Analysis in Danish](#)
- *Journal of Language Works* (2019)
- [The Danish Gigaword Project](#)
- *Proceedings of the 23rd Nordic Conference on Computational Linguistics* (2021)

INVITED TALKS

- [SENTIDA: A New Tool for Sentiment Analysis in Danish](#)
- *Invited talk at NLP workshop at Interacting Minds Centre Aarhus, Denmark, 2019*