# Frederik Lange

Political scientist turned data scientist. Big passion for learning about the data science space and exploring new developments. 3 years of full-time experience from the Danish Ministry of Finance and the OECD.

frederik.lange@hotmail.com +4528103854 github.com/frederiklange frederiklange.github.io

# **Experiences**

External Consultant, OECD, December 2023 - March 2024

Hired to do a case study on the use of spending reviews and efficiency analyses in Denmark (expected publication in 2024)

Head of Section, Ministry of Finance, February 2021 - October 2023

- Prepared more than 30 decision making papers for the Minister of Finance and the Danish government
- Covered and prepared documents for the political negotioations on the Danish Media Agreement for 2022-2025 and 2023-2026
- Engaging in a wide range of contacts with both external and internal stakeholders to build constructive collaborative relationships through strong communication skills

# **Education**

MSc in Data Science, University of Southern Denmark, 2024 - 2026

• Enrolled with start in september 2024

MSc in Political science, University of Copenhagen, 2019 - 2021

- Focus on political behavior and advanzed quantitative methods
- Thesis on political polarization in speeches using 0.5 million parliamentary speeches to create a machine learning based measure of polarization, trained model using Google Cloud Platform
- Applied advanced statistical methods and research designs to study political behavior (e.g. Regression Discontinuity Designs)
- Took data science courses and gained experience with Python, R, machine learning, and NLP

• **GPA:** 10.8/12.0

MSc in Political Science (exchange), Sciences Po Paris, Spring 2020

- Took courses within the areas of public policy and microeconomics, including a special focus on labor market economics
- **GPA:** 16.1/20.0 (equivalent to 12.0)

BSc in Political science, University of Copenhagen, 2016 - 2019

- Thesis on the impact of motivated reasoning on the ability to assess performance information using a survey experiment
- Acquired a range of analytical and communicative skills to analyze complex issues with statistical methods

• **GPA:** 10.5/12.0

# **Skills**

# **Programming Languages**

Python, R, CSS, Go (learning), JavaScript (learning)

#### Libraries and tools

Pandas, Numpy, scikit-learn, xgboost, tidyverse, git, GitHub, VScode

# **Projects**

# Machine Learning and Conflict Prediction

Explored how machine learning (xgboost and more) can help forecast and predict future conflicts

# Polarization in Parliamentary Speeches

Measured polarization in 0.5 million parliamentary speeches with a machine learning based measure

#### Certificates

Google Advanced Data Analytics Professional Certificate (expected completion: summer 2024), enrolled at boot.dev

### Languages

Danish (mother tongue), English (fluent), French (A2-B1)

### **Interests**

Climbing, running, reading, cooking