

BJARKE FELBO

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EDUCATION

Massachusetts Institute of Technology

Graduate Student in the Scalable Cooperation research group

September 2016 – Present

Cambridge, Massachusetts

- Research interests: natural language processing, reinforcement learning, transfer- and multitask learning, disentangled representations, interpretability in machine learning and computational social science.
- Advisor: Iyad Rahwan
- MSc Committee: Hugo Larochelle, Alex ‘Sandy’ Pentland
- GPA: 5.0/5

Massachusetts Institute of Technology

Research Collaboration with the Human Dynamics research group

January 2015 – August 2016

Copenhagen, Denmark

- Collaborators: Yves-Alexandre de Montjoye and Alex ‘Sandy’ Pentland

Massachusetts Institute of Technology

Exchange Student

September 2014 – December 2014

Cambridge, Massachusetts

- GPA: 4.6/5

Technical University of Denmark

BSc Eng in Mathematics and Technology

September 2012 – February 2016

Copenhagen, Denmark

- GPA: 10.7/12

WORK EXPERIENCE

Janys Analytics

Technical Consultant

February 2016 – August 2016

Copenhagen, Denmark

- Responsible for designing and implementing deep learning NLP models used to extract insights from social media datasets. Models were used to serve high-profile clients such as the Wall Street Journal.

Boston Consulting Group

Visiting Associate

May 2016 – July 2016

Copenhagen, Denmark

- Involved in two projects focusing on IT strategy in the financial sector and the sales of a major retailer. Responsible for strategy communication, competitor mapping, market analysis and consumer surveys.

Gjensidige Insurance

Junior Analyst in the CRM Analytics Department

May 2011 – August 2014

Copenhagen, Denmark

- Managed analyzes for our Business Partner department. Translated their needs into statistical analyzes done with SAS/R. Involved supervising two other Juniors Analysts and presenting for leaders/directors.

PUBLICATIONS

- **Bjarke Felbo**, Alan Mislove, Anders Søgaard, Iyad Rahwan and Sune Lehmann. *Using millions of emoji occurrences to learn any-domain representations for detecting emotion, sentiment and sarcasm*. Empirical Methods in Natural Language Processing (EMNLP) 2017 long paper (oral).
- Andres Campero, **Bjarke Felbo**, Joshua B. Tenenbaum and Rebecca Saxe. *A First Step in Combining Cognitive Event Features and Natural Language Representations to Predict Emotions*. Cognitive Computational Neuroscience (CCN) 2017 short paper.
- **Bjarke Felbo**, Pål Sundsøy, Alex ‘Sandy’ Pentland and Sune Lehmann. *Modeling the Temporal Nature of Human Behavior for Demographics Prediction*. European Conference on Machine Learning (ECML-PKDD) 2017 long paper (oral).

NON-ARCHIVAL PUBLICATIONS

- Nick Obradovich, **Bjarke Felbo**, Pinar Yanardag, Adrian Borsa, Jennifer Anne Burney, Jason J. Jones and Iyad Rahwan. *The effects of climatic events on expressed climate change belief*. Annual Meeting of American Political Science Association (ASPA) 2017.
- **Bjarke Felbo**, Alan Mislove, Anders Søgaard, Iyad Rahwan and Sune Lehmann. *Using millions of emoji occurrences to learn any-domain representations for detecting emotion, sentiment and sarcasm*. Association for Computational Linguistics (ACL) 2017 Repl4NLP workshop.
- Richard Kim*, **Bjarke Felbo***, Nick Obradovich and Iyad Rahwan. *Quantifying structural factors affecting racial tensions during 2016 US presidential election*. International Conference on Computational Social Science (IC2S2) 2017.
- **Bjarke Felbo**, Pål Sundsøy, Alex ‘Sandy’ Pentland, Sune Lehmann and Yves-Alexandre de Montjoye. *Using Deep Learning to Predict Demographics from Mobile Phone Metadata*. International Conference on Representation Learning (ICLR) 2016 workshop.

* shared first authorship

HONORS & AWARDS

- Marvin Minsky Fellow** September 2017 – July 2018
 - One of three “Minsky Fellows” supported for their promising research within AI and machine learning.
- 2nd place at Best Technical Bachelor Thesis Competition** September 2015
 - Sponsored by Accenture. Was awarded for my thesis on analyzing mobile phone logs using deep learning.
- 1st place at IT Case Competition (Team Captain)** March 12–14, 2015
 - Sponsored by Deloitte and others. Case on how a Forbes 500 bank could use bitcoin strategically.
- 1st place at PeakTime Business Competition (Team Captain)** May 2–4, 2014
 - Sponsored by McKinsey and others. 1000 participants competed using business simulations and cases.

OPEN SOURCE (GITHUB.COM/BFELBO)

DeepMoji: Python library for transfer learning wrt. emotion-related NLP tasks (author).
Bandicoot: Python library for mobile phone data analysis (part of initial development).

SKILLS

Programming: Proficient in Python and R. Knowledge of C#, C++, Java and JavaScript.
Languages: Fluent in Danish and English (TOEFL iBT 116/120). Conversant in German.
Management: Certified Project Leader of the ISO 21500 standard.

ADVISING/SUPERVISING (IN ACADEMIA)

Alex Chen	MIT-EECS	2017 – Present
Max Lever	Northeastern University	2017
Han Thi Nguyen	Imperial College London	2017
Mahalaxmi Elango	MIT-EECS	2017
Remi Mir	MIT-EECS (MEng Thesis)	2016 – Present
Edward Park	MIT-EECS	2016 – 2017
Robert Rusch	MIT-EECS	2016