

Felix Teufel

MACHINE LEARNING SCIENTIST

Cambridge, MA

 fteufel |  felixteufel | Updated April 2025

Experience

Lila Sciences

SCIENTIST I, MACHINE LEARNING

Cambridge, MA, USA

Mar. 2024 - ongoing

Novo Nordisk A/S

INDUSTRIAL PHD STUDENT

- ML for peptide discovery. Machine Intelligence, AI & Digital Research

Måløv, Denmark

Feb. 2022 - Feb. 2025

Harvard Medical School

VISITING RESEARCHER IN THE DEBORA MARKS LAB

- Sequence modeling for variant effect prediction

Boston, MA, USA

Aug. 2024 - Nov. 2024

Stanford University

RESEARCH INTERN IN THE AARON NEWMAN LAB

- Developing models to predict stem cell states reliably in multiple tissues

Stanford, CA, USA - remote (COVID)

Mar. 2021 - Feb. 2022

F. Hoffmann - La Roche AG

INTERN IN PHARMA TECHNICAL OPERATIONS

- Natural Language Processing of biopharmaceutical manufacturing data
- Developed productivity tools for Google Workspace (Apps Script)

Basel, Switzerland

Aug. 2019 - Jun. 2020

11er Nahrungsmittel GmbH

SUMMER INTERN IN RESEARCH AND DEVELOPMENT

- Developed chemometric models (PLS regression) for near-infrared spectrometry (NIR) analytics

Frastanz, Austria

Jun. 2015 - Sep. 2017

Education

University of Copenhagen

PH.D. MACHINE LEARNING

- Advisor: Ole Winther

Copenhagen, Denmark

Feb. 2022 - Feb. 2025

ETH Zürich

M.SC. BIOTECHNOLOGY

- GPA: 5.76/6 — Graduated with distinction**
- Lab Assistant** in the Bioprocess Laboratory (Sven Panke group)
- Technical University of Denmark**, Kongens Lyngby, Denmark – exchange semester for thesis research

Basel, Switzerland

Sep. 2018 - Jun 2021

BOKU University Vienna

B.SC. FOOD SCIENCE AND BIOTECHNOLOGY

- GPA: 1.6/5 (1 = best) — Graduated with distinction**
- Teaching Assistant** for Biochemistry
- Virginia Tech**, Blacksburg, VA, USA – represented Austria in a competition for student-founded startups (2018)

Vienna, Austria

Oct. 2015 - May 2018

Research

SELECTED PUBLICATIONS (FULL LIST ON [GOOGLE SCHOLAR](#))

Batched Energy-Entropy acquisition for Bayesian Optimization

NEURIPS 2024

2024

[F. Teufel](#), C. Stahlhut, J. Ferkinghoff-Borg

DeepLoc 2.1: multi-label membrane protein type prediction using protein language models

NUCLEIC ACIDS RESEARCH

2024

M. Ødum, [F. Teufel](#), V. Thumhuri, J.J.A. Armenteros, A.R. Johansen, O. Winther, H. Nielsen

BEND: Benchmarking DNA language models on biologically meaningful tasks

ICLR 2024

2024

F. I. Marin*, F. Teufel*, M. Horlacher, D. Madsen, D. Pultz, O. Winther, W. Boomsma

SecretoGen: towards prediction of signal peptides for efficient protein secretion

GENBIO @ NEURIPS 2023

2023

F. Teufel, J. C. Refsgaard, C. Stahlhut, H. Nielsen, O. Winther, D. Madsen

DeepPeptide predicts peptide cleavage using conditional random fields

BIOINFORMATICS

2023

F. Teufel, J. C. Refsgaard, C.T. Madsen, C. Stahlhut, M. Grønborg, O. Winther, D. Madsen

Deorphanizing Peptides Using Structure Prediction

JOURNAL OF CHEMICAL INFORMATION AND MODELING / MLSB @ NEURIPS 2022

2023

F. Teufel, J. C. Refsgaard, M. A. Kasimova, K. Deibler, C.T. Madsen, C. Stahlhut, M. Grønborg, O. Winther, D. Madsen

Combining mass spectrometry and machine learning to discover bioactive peptides

NATURE COMMUNICATIONS

2022

C.T. Madsen, J. C. Refsgaard, F. Teufel et al.

SignalP 6.0 predicts all five types of signal peptides using protein language models

NATURE BIOTECHNOLOGY

2022

F. Teufel, J.J. A. Armenteros, A. R. Johansen, M. H. Gíslason, S. I. Pihl, K. D. Tsirigos, O. Winther, S. Brunak, G. v. Heijne, H. Nielsen

Talks & Awards

TALKS

- | | | |
|------|--|---------------------|
| 2024 | Digital Health Center, Berlin Institute of Health at Charité
Benchmarking DNA language models on biologically meaningful tasks | Online |
| 2023 | BC2 Basel Computational Biology Conference
DeepTMHMM predicts alpha and beta transmembrane proteins using deep neural networks | Basel, Switzerland |
| 2023 | Inter-Academy Workshop on Membrane Protein Structure and Folding
DeepTMHMM predicts alpha and beta transmembrane proteins using deep neural networks | Stockholm, Sweden |
| 2021 | Novozymes A/S
Predicting signal peptides using protein LMs | Copenhagen, Denmark |

SCHOLARSHIPS

- | | | |
|---------|--|-----------------|
| 2015-18 | Merit-based Scholarship , BOKU Vienna | Vienna, Austria |
|---------|--|-----------------|

Extracurricular Activities

PhD and Postdoc Fellowship Committee of Novo Nordisk

Copenhagen, Denmark

COMMITTEE MEMBER

Nov. 2022 - Feb. 2022

- Organize workshops and events for ~80 PhD students and postdocs in the organization

Graduate Consulting Club of ETH Zürich

Zürich, Switzerland

TEAM LEADER

Mar. 2019 - May 2021

- Led a team of 5 student consultants on a market positioning project
- Consulted a computer vision / OCR startup on their market entry strategy in Switzerland

Biotechnology Students Association of ETH Zürich

Basel, Switzerland

VICE PRESIDENT

Feb. 2019 - Sep. 2020

- Responsible for industry relations
- Student delegate in the appointment committee for new professorships
- Representative in department commissions

Teaching

Thesis supervision & co-supervision

University of Copenhagen & DTU

4 M.Sc. theses and 6 projects

2021 - 2025

Deep Learning

DTU

M.Sc. course, supervised project work of 17 students

2023

Reviewing

- 2025 **ICML**, International Conference on Machine Learning
- 2025 **ACS Synthetic Biology**
- 2025 **Journal of Agricultural and Food Chemistry**
- 2024 **Nature Communications**
- 2023-24 **NeurIPS Datasets & Benchmarks**, Neural Information Processing Systems
- 2024 **Computational and Structural Biotechnology Journal**
- 2023 **Journal of Chemical Information and Modeling**
- 2023-24 **Machine Learning in Structural Biology Workshop at NeurIPS**
- 2023 **NeurIPS**, Neural Information Processing Systems
- 2023-24 **Nature Biotechnology**
- 2023 **Proteomics**
- 2022 **Bioinformatics**
- 2022 **ICLR**, International Conference on Learning Representations
- 2022 **PeerJ**
- 2022-24 **Scientific Reports**

Skills

Languages	German/Swiss German (Native), English (C2), Spanish (B2), French (B1)
Programming Languages	PyTorch, Python, R, SQL, Google Apps Script
Tools	Linux, Google Cloud Platform, Git, Github