Floris van der Flier

Curriculum Vitae

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Bio

I dedicated my bachelor program to building a thorough understanding of biology, chemistry and physics. I began approaching the interface with computer science as I progressed in my studies, and chose to focus almost exclusively on machine learning during my master's in bioinformatics. Due to my cross-disciplinary background, I'm adept at navigating and understanding diverse scientific literature and assimilating to different domains of machine learning applications. My main interest lies in representation learning of protein sequences for protein engineering and design.

Education

2017–2019 **Master of Science**, *University of Copenhagen*, Copenhagen.
MSc Bioinformatics, specialization in computer science

2017–2017 **Minor**, *Technical University of Denmark*, Lyngby.
Minor in chemical engineering, programming and computational biology

2014–2017 **Bachelor of Science**, *Wageningen University*, Wageningen.
BSc Molecular Life Sciences

2007–2014 **Gymnasium**, *Vossius Gymnasium*, Amsterdam.

Work Experience

2022–Current **PhD**, *Wageningen University & Research*, Wageningen.
Efficient engineering of non-native enzyme properties using representational learning.

2021–2022 **Freelancer**, *DeltaG*, Amsterdam.
Offering consultancy in machine learning guided protein engineering.

2020–2021 **Research Assistant**, *AMC - Academic Medical Center*, Amsterdam.
Machine learning research for the gut microbiome and metabolic disease.

2020–2020 **Teaching Assistant**, *University of Copenhagen*, Copenhagen.
Teaching assistant for the course Large-scale data analysis.

2019–2020 **Visiting Researcher**, *University of Copenhagen*, Copenhagen.
Collaborative project with Wouter Krogh Boomsma in end-to-end differentiable protein sequence to structure maps using probabilistic deep learning methods at the Machine Learning department.

2018–2019 **Student Employee**, *Plastisens ApS*, Copenhagen.
Development of an on-site microfluidic biosensor that screens for antibiotics in milk. Main responsibilities in gene cloning and biochemical assay development.

Competences

Programming	Python, Unix
Software	Git, Docker
Deep Learning	PyTorch, Keras, TensorFlow, GPyTorch, BoTorch, HuggingFace

Publications

2024 **CSBJ**, *Enzyme structure correlates with variant effect predictability*, https://doi.org/10.1016/j.csbj.2024.09.007.

Languages

Dutch	Native
English	Fluent