Nils Eckstein

Dorfstrasse 57, 8037 Zürich, CH - nils.eckstein@googlemail.com

Github, Portfolio

EDUCATION

Ph.D. Information Technology	ETHZ, Zürich, CH	09.2016 - 05.2021
Visiting Scientist in Residence	HHMI Janelia, US	09.2018 - 09.2020
Master of Science Physics	ETHZ, Zürich, CH	09.2014 - 09.2016
Bachelor of Science Physics	ETHZ, Zürich, CH	09.2011 - 09.2014

EXPERIENCE

AI4Life Resident
Novartis - AI Innovation Lab (07.2021 - current)
- Development of Deep Neural Network interpretability methods.

Ph.D. Researcher
Institute of Neuroinformatics (ETHZ) & Funke Lab (HHMI Janelia)
- Development of novel deep learning computer vision algorithms for large scale biomedical datasets.
- Thesis: *Connectome++: Microtubule Reconstruction and Neurotransmitter Prediction from Large Scale Electron Microscopy Volumes.*

SELECTED PUBLICATIONS

Eckstein et al. - Neurotransmitter Classification from Electron Microscopy Images at Synaptic Sites in Drosophila. bioRxiv 2020.06.12.148775.

Eckstein et al. - Microtubule Tracking in Electron Microscopy Volumes. MICCAI 2020. Lecture Notes in Computer Science, vol 12265.

Eckstein et al. - Discriminative Attribution from Counterfactuals. ArXiv 2021.

Heinrich et al. - Whole-cell organelle segmentation in volume electron microscopy. Nature 2021.

Li et al. - The connectome of the adult Drosophila mushroom body provides insights into function. eLife 2020.

AWARDS

MICCAI 2020 Young Scientist Award.