Experience _____

Fleek Remote Dec. 2022 - Present SOFTWARE ENGINEER

• Building Fleek Network, a decentralized edge platform in Rust

• Among other things, I worked on

- the consensus engine, based on Narwhal & Bullshark [blog post]

- a private and secure, decentralized compute service using Intel SGX TEEs [blog post]

- a latency-based hierarchical clustering to form a network topology for fast and reliable message propagation [blog post]

- a bridge from Fleek Network to Ethereum

Ludwig Maximilian University of Munich

Ph.D. Student in Computer Science

Dec. 2019 - Present

- Research Area: Computer Vision / Deep Learning
- On leave since November 2022

RWTH Aachen University

SOFTWARE DEVELOPER

Aachen, Germany Sep. 2015 - Aug. 2018

Munich, Germany

• Worked part-time during my bachelor's degree, mostly building simple web apps

Education

University of Bath

Bath, United Kingdom Oct. 2018 - Sep. 2019

M.Sc. IN COMPUTER SCIENCE

Grade: Distinction

Aachen University of Applied Sciences

B.Sc. in Applied Mathematics and Computer Science

Aachen, Germany Sep. 2015 - Aug. 2018

Publications

- * denotes equal contribution
- [1] Matthias Wright and Björn Ommer. ArtFID: Quantitative Evaluation of Neural Style Transfer. GCPR 2022 (Best Paper Honorable Mention). [Code]
- [2] Dmytro Kotovenko*, Matthias Wright*, Arthur Heimbrecht, and Björn Ommer. Rethinking Style Transfer: From Pixels to Parameterized Brushstrokes. CVPR 2021. [Code]

Blog Posts

Leveraging Narwhal & Bullshark For Consensus To Meet The High Demands Of An Edge Network

• Using Narwhal & Bullshark for committee-based consensus [URL]

Latency-Optimized Topology

• Using latency measurements to build an optimized network topology [URL]

Bloom Filters and Cuckoo Filters for Cache Summarization

• Comparing and benchmarking Bloom filters and Cuckoo filters [URL]

Skills

Programming Languages Rust, Python, Java

Languages German (native), English (fluent), French (elementary)