Amory Hoste

amoryhoste.com
Edinburgh, United Kingdom • Linkedin • Belgian Citizen

SUMMARY

Versatile, hands-on software engineer with experience building resource efficient and performant cloud infrastructure. Specifically compute services, serverless and systems for machine learning.

WORK EXPERIENCE

Huawei R&D UK, Senior Research Engineer - Systems **May 2023–Present**
Edinburgh, UK

- Designed and implemented new scheduling algorithm reducing performance interference of colocated cluster workloads across shared resources.
- Currently working on accelerator sharing and resource disaggregation, specifically aimed towards machine learning workloads.
- Skills: Go, C++, CUDA, Hardware Performance Counters, eBPF

Huawei R&D UK, Research Engineer - Systems **Nov 2021–May 2023**
Edinburgh, UK

- Developed representative benchmark suite, load generator, infrastructure and experiment automation for evaluation of various projects.
- Built new distributed scheduling architecture with improved scalability, fault-tolerance, high resolution metrics capture and reduced metric staleness compared to existing solutions.
- Implemented various scoring algorithms, balancing resource utilization and performance degradation due to overcommitment.
- Proposed several new research directions and architecture improvements. Mentored intern towards implementation and evaluation of one such proposal.
- Skills: Go, Python, Kubernetes, Serverless, Microservices, Prometheus, Performance Analysis

IDLab, Research Intern **Summer 2018 & 2019**
Ghent, Belgium

- Developed web archival and web archive quality analysis tools for the PROMISE web archival project by the Royal Library of Belgium.
- Developed fragmented linked data R-tree index and client to enable efficient geospatial queries of linked data.
- Created scraping and conversion scripts to expose live bike sharing data as linked data.

EDUCATION

ETH Zurich **Sep 2019–Sep 2021**
MSc Computer Science. Grade: 5.71/6 (Rank: Top 10%).

- Focus on (Distributed) Systems and High Performance Computing.
- Thesis: Analysis and Optimization of Serverless Cold Start Latencies through Function Snapshots.

Ghent University **Sep 2016–Jun 2019**
BSc Computer Science. Grade: 808/1000 (Rank: 1st of class).

TECHNICAL SKILLS

Languages:	Go, C, C++, Python, CUDA
Technologies:	Kubernetes, Prometheus, Container Runtimes, eBPF, Serverless (Faas)
Other:	Cloud Infrastructure, Distributed Systems, Operating Systems, Heterogeneous Hardware

INTERESTS

Outside of work, I enjoy tinkering with technology, piano, running, football, hiking and ski touring.