Adam Deryło

+48 698 608 344 a.m.derylo@gmail.com linkedin.com/in/adamderylo github.com/aderylo

Education

Warsaw University **Oct. 2020 – Sep. 2024**

Double degree: BSc in Computer Science & BSc in Computational Cognitive Science *Warsaw, Poland*

- Top rated Computer Sscience undergraduate program in Poland according to QS ranking.
- Rector's scholarship for academic achievements.
- Planing on one year masters after the bachelor's degree.

Experience

Taiwan Semiconductor Manufacturing Company **Jul. 2023 - Sep. 2023**

Software Engineering Intern — Pytorch, Huggingface, Scikit-learn, Python *Hsinchu, Taiwan*

- AI Application and Platform Development Team responsible for the automation of fab processes.
- Developed custom BLIP2 based model architecture for photomask defect classification and captioning.
- Worked on generative model for text to image generation of rare photomask defects.
- Devised an asynchronous multistage data pipeline optimizing for efficient VRAM usage and throughput.
- Ranked top 8 out of 80+ Interns in the final intern project competition.

Goldman Sachs **Jun. 2022 - Aug. 2022**

Summer Analyst | Redis, Java, Procmon, Golang *Stockholm, Sweden*

- Global reconciliations team, daily processing of 80+ mln trade & position data entries.
- Collaborated on optimizing caching performance and reliability of data loading processes.
- Worked on extending database performance limits with intelligent cache priming based on Change Data Capture.
- Developed Redis cache monitoring tool suite to speed up emergency debug and development cycle.

ReSpo.Vision **Jul. 2021 - May. 2022**

Software Engineer Intern | Python, Postgre, Git, SQL, Pytorch *Warsaw, Poland*

- 40+ sprints under the Scrum development framework in a rapidly growing team.
- Worked on a back-end implementation of a betting hints generator that withstood 100k API calls daily.
- Created a deep learning NLP module for context-dependent noun declination.

Projects

Bachelor thesis with NVIDIA | *C++, CUDA, CMake, Python* **Oct. 2022 - Jun. 2023**

- Worked with NVIDIA DALI team on accelerating image decompression on GPUs.
- Contributed module to the open-source DALI library, improving the performance of the FITS decoder.
- Worked with hardware features such as GPU Direct Stograge to improve over baseline CUDA kernel.
- Devised a testing & profiling pipeline to allow for benchmarking various approches to optimization.
- Showcased the result by rewriting NASA Coronal Hole Semantic Segmentation pipeline and achieving 70% speedup.

C interpreter | *Haskell, GHC, Cabal, BNFC* **Apr. 2023 - Jun. 2023**

- Created an interpreter for a C-like language, called Latte.
- Implemented support for scoping, functions, multidimensional arrays, classes and many more.
- Utilized monad transformers to create various features such as garabage collection mechanism for the language.

Minix OS | *C, Quemu, Bash, rsync* **Apr. 2023 - Jun. 2023**

- Developed various custom features for the Minix OS, which required modifying the OS kernel extensivly.
- Implemented theoretically optimal scheduler, improving the performance of the system.
- Devised an add-on for the virtual file system which introduced file exclusivity mechanism.

Distributed alerting system | *Grpc, Google Cloud Platform, Python* **Nov. 2022 - Jan. 2023**

- Developed scalable microservice system for monitoring services and running complex alerting routines.
- Utilized GRPC, PubSub queues, Cloud SQL and other tools to satisfy SLO requirements for 10k services.
- Project supervised by Google employees.

Extracurricular

2nd Place, BEST Hacking league 2023 Hackathon
Member, Bain & Company Champions Class 2023
1st Place, Goldman Sachs EMEA 2022 Hackathon

Skills

Programming Languages: Python, C/C++, Haskell, Java, JavaScript, R, Ocaml, Go, SQL
Technologies: Git, Linux, Jira, Redis, Docker, Pydantic, Huggingface, React, Cloud Run
Natural languages: English (C2), Polish (Native), Spanish (B1)