Adam Deryło

EDUCATION

Warsaw University Oct. 2020 - Sep. 2024

Double degree: BSc in Computer Science & BSc in Computational Cognitive Science

Warsaw, Poland

- Top rated Computer Science undergraduate program in Poland according to QS ranking.
- Rector's scholarship for academic achievements.
- Planing on pursuing a one-year Master's degree in Computer Science.

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.

Bain & Company Mar. 2021 - Apr. 2021

Spring Intern | Nielsen, Ipsos

Warsaw, Poland

- Supported a consulting team in the area of wood market data analysis.
- Worked on a team-based business case study under the supervision of a dedicated mentor.

Projects

Bachelor thesis with NVIDIA | C++, CUDA, GPUDirect Storgage, CMake, Python

Oct. 2022 - Jun. 2023

- \bullet Worked with NVIDIA DALI team on accelerating image decompression in ML astronomy workflows.
- Contributed module to the open-source DALI library, improving the performance of the FITS decoder.
- Devised a testing & profiling pipeline to allow for benchmarking various CUDA kernel optimizations.
- 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

- $\bullet\,$ 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 $\mid C$, 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

Languages: English (C2), Polish (Native), Spanish (B1)