ADAM DERYŁO

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

EDUCATION

Warsaw University   Oct. 2020 – Ongoing
Bachelor of Science in Computer Science   *Warsaw, Poland*
- Top rated CS undergraduate program in Poland according to QS ranking.
- 1st-year modules: Functional Programming, OOP, C, Introduction to AI, Linear Algebra.
- 2nd-year modules: Adv. Algorithms, Databases, Computer networks, Web Apps, Statistics, NLP.
- 3rd-year modules: Distributed systems, Concurrency theory, Security of computer systems.

EXPERIENCE

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 using cutting-edge architectures such as BERT.
- NLP module tackled the problem of context-dependent noun declination in Slavic languages.

PROJECTS

Bachelor thesis with NVIDIA | *C++, CUDA, Python*   Oct. 2022 - Present
- GPU acceleration of image decompression in machine learning workflows.
- Project aimed at helping NASA data scientists that use FITS data format compressed with RICE algorithm.
- Collaborating with the NVIDIA DALI team on incorporating the solution into their data loading library.

Distributed alerting system | *Grpc, Google Cloud Platform, Python*   Nov. 2022 - Jan. 2023
- Developed scallable microservice system for monitoirng services and running complex alerting routines.
- Utilized GRPC, PubSub queues, Cloud SQL and other tools to satisfy SLO requirements.
- Project supervised by Google employes.

N-dimenensional labirynth solver | *C, Valgrind, Cmake, Git*   Jun. 2022
- Developed a high-performance traverser for multidimensional mazes/large graphs.
- Utilized most memory efficient solution by incorporating 2-bit BFS algorithm.
- Implemented arbitrary large integer type to facilitate enormous labyrinths and showcase memory efficiency.

Operating system process scheduler | *C, Quemu, Make, Git*   May. 2022
- Implemented multiple processes scheduling algorithms in a Minix microkernel operating system.
- Employed Quemu, and Rsync for faster development iterations.

Concurrent Unix directory | *C, Pthreads, Helgrind, Cmake, Git*   Jan. 2022
- Implemented UNIX file directory system, which allowed for concurrent creation, deletion and movement of files.
- Utilized tailored-made readers-writers lock with Latest Common Ancestor writer locking.

Enhancing Splay Tree for pattern search | *C++, Catch2, Cmake, Bash, Git*   Dec. 2021
- Developed an algorithm for efficient search of patterns in DNA sequence.
- Utilized a splay tree data structure enhanced with attributes updated through lazy propagation.

EXTRACURRICULAR

Member, Bain & Company Champions Class 2023
1st Place, Goldman Sachs EMEA Engineering Hackaton 2022
2nd Place, PSDC 2020 debating championship, preliminary stage to World Schools Debating Championship
Laureate, 8/1000+ in the 31st National Philosophy Olympiad

SKILLS

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