Adam Adli

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Software Engineer with 5+ years of professional experience. I believe software is not only a technicality, but an art.

CORE COMPETENCIES

Python · SQL · Data Engineering · LLM Tooling · Chatbot Development · ETL Processes · FastAPI · PostgreSQL · AWS · Azure · Machine Learning · TensorFlow · PyTorch · ReactJS · JavaScript · Java · Kotlin · C++ · Android Development · Data Analysis · NumPy

EXPERIENCE

Intel · Software Engineer   Jun. 2021 – Present

- **Pioneered LLM-based projects** at Altera (Intel's FPGA division), delivering a **technical seminar to 1000+ employees** that drove widespread adoption of AI-powered tools across engineering departments.
- Architected a **novel Retrieval Augmented Generation (RAG) algorithm** in **Python & LangChain** combining advanced NLP techniques from literature to extract features from technical documents and map them to issue tracker cases. This innovative solution transformed a previously infeasible manual review process into an automated and scalable system, **reducing document processing time by 95%** and significantly improving information retrieval accuracy.
- Drove development as a primary contributor of a **company-wide internal chatbot application**, leveraging **ReactJS front-end** and **FastAPI Python back-end** with **LangChain** for agent functionality. Integrated company knowledgebase from Confluence and issue tracker integrations resulting in streamlined user experience for engineers.
- Engineered Quartus **ML training & inference infrastructures** using **TensorFlow** & **ONNX Runtime** in **Python** and **C++**.
- Executed **end-to-end data scraping, analysis & ML projects** applying data science techniques to FPGA CAD tools.
- Delivered **customer-facing features** in Intel® Quartus® Prime software-suite using **C++, TCL,** and **Qt GUI** interface.

x8 Data Company, LLC. · Contract Data Engineer   Feb. 2021 – Jun. 2021

- Engineered **high-performance data processing** solutions, **achieving 10-100x runtime speed-up** through advanced Python & PostgreSQL database optimization techniques and AWS cloud architecture (S3, RDS, Mechanical Turk).
- Developed **comprehensive data pipeline infrastructure**, incorporating **web scraping** (Selenium, BeautifulSoup4), **GIS processing** (PostGIS), and **financial data integration** (Bloomberg API), enhancing data acquisition and analysis.
- Engineered **Slack ChatBot App** to accompany data labeler payroll system using Python and Flask.

Intel · Software Engineer Intern   May. 2019 – Oct. 2020

- Established **internal infrastructure for data scraping**, analysis, and reporting using **Python**, **SQL**, and **JavaScript**.

MyDigitalGroup.com Inc. · Contract Android App Developer   Jun. 2016 – Sep. 2023

- Developed two production-quality **Android applications** using **Java & Kotlin**: DaycareWebWatch & MyDigitalViewer.
- Livestreaming and communication solution for 140 child-care facilities across North America (**30,000 installations**).

EDUCATION

University of Toronto

Honours B.Sc., Computer Science Specialist + PEY, Class of 2021   GPA: **3.90** / 4.00

- **Award:** St. Michael's College Silver Medal (for graduating with GPA above 3.70)
- **Relevant Courses**: Compilers, OS Design, Computer Vision, Security, Parallel Programming, Systems & Data Structures.
- **Publication**: Adli, A., & Tyrrell, P. (2020). Impact of Training Sample Size on the Effects of Regularization in a Convolutional Neural Network-based Dental X-ray Artifact Prediction Model. *Journal of Undergraduate Life Sciences*, *14(1)*, *5*. https://doi.org/10.33137/juls.v14i1.35883.

MSc. (part-time, on indefinite hiatus), Computer Science (Thesis-based), Admitted 2022

- Currently on indefinite hiatus to focus on professional development in industry working on practical applications.
- Completed coursework with focus on Machine Learning and Blockchain Engineering.