

Aman Luqman

(630) 888-9455 | aluqman@hawk.iit.edu | aluqman.dev

Professional Experience

June 2021 - Present

physIQ, Chicago, IL - *Software Engineer, Data Processing*

- Architected solutions to prevent catastrophic data loss via the "lost-update" problem in a RESTful API.
- Integrated new backend cloud-based services to our production environments via addition and engineering of new Kubernetes services.
- Enhanced Flink job runtime performance by 20% by creating custom data serializers.
- Improved test coverage of codebase by upwards of 40% by integrating Sonarqube source code scanning for Python and Kotlin-based repositories.
- Utilized Apache Flink, Kafka, and Cassandra in a cloud-native (GKE) environment data engineering pipeline with in-house algorithms to process streams of data of patient's physiology.
- Improved validation schemas for algorithm pipelines via REST API routes using Dropwizard.
- Enabled Windows users to develop and partake in algorithm development research via the creation of a system-agnostic build tool, leveraging Python and Nox.

January 2022 - January 2023

Illinois Institute of Technology, Chicago, IL - *Student Researcher*, <https://github.com/smuller/PriML-Lang>

- Worked with professors and graduate students to develop and enhance a compiler for a responsive prioritized parallel programming language.
- Enhanced PriML compiler by allowing for the compilation of multiple files, as well as added parsing capabilities and internal representations of language structures and signatures.

August 2019 - June 2021

Aral Resources, Chicago, IL - *Junior Systems Administrator*

- Decreased website load times by an estimated 75% via a server migration from a Windows server home lab to a VPS-hosted Linux server.
- Acted as an administrator and system maintainer for an Ubuntu-20.04 based web server.

Skills

Languages

- Proficient/production-level experience in Python, Kotlin, Java, Elixir, Standard ML, Haskell, OCaml, and Bash scripting
- Experienced with Rust, JavaScript, HTML, CSS

Technologies

- Technologies used include Git, CI/CD, Linux, MySQL/CloudSQL, Kubernetes, Docker, Google Cloud (GKE), React, Svelte, and Phoenix.

Education

August 2020 - December 2022

Illinois Institute of Chicago, Chicago, IL - *Bachelor of Science, Computer Science, GPA: 4.0, Summa Cum Laude*

Personal Projects

DndStore - github.com/alugman/DnDStore

- Engineered a RESTful API leveraging Elixir, PostgreSQL, and the Phoenix framework to create a full-stack web app which performs CRUD operations on character sheets from Dungeons and Dragons.

TempMon (name pending)

- Architected and implemented a solution utilizing Elixir, Nerves, Grafana, and TimescaleDB to monitor temperature and humidity statistics for a space utilizing a DHT-11 sensor.