Alex Diaz

 Atlanta, GA · alejandrojsdiaz@outlook.com · 678-315-1715
 GitHub · LinkedIn · Twitter · Diasdiaz

Education

Georgia Institute of Technology	Atlanta, GA
Master of Science in Computer Science GPA 4.0 / 4.0	*Jan. 2021 – May 2023*
The University of Georgia	Athens, GA
Bachelor of Arts in Economics, Minor in History	*Aug. 2013 – May 2017*

Projects

- *2021 – **Multi-threaded socket server and client** –* Programmed a multi-threaded server and client in C utilizing the Linux system call api and Sockets library. Demonstrated IPv4 / IPv6 interoperability and multi-threading management (C libraries).

- *2021 – **AI Agent** –* Architected an AI agent based on Newell's SOAR to solve to solve Raven's Progressive Matrices. I used computer vision (i.e., scale-invariant feature transformation (SIFT)) and human-like cognition algorithms to enable the agent to process IQ test images as problems; resulting in a success rate of 70%. I implemented the agent in Python, using object oriented computer programming, OpenCV, and NumPy. Written with meta-cognition facilities to better solve problems.

- *2020 – **TimeTime** –* Coded a Java Android application that prompts users through their lock screen to log their daily activities. The application uses a model-view-controller pattern to provide users an infinite scrolling list and enable interactions with good performance and a beautiful UI / UX created with Jetpack. My architecture allowed for local persistent data (RoomDB) and concurrency.

- *2019 - **Spotify Music Advisor** –* Engineered a Java application using the Spring boot framework, capable of REST API communication with Spotify. I implemented the application to use OAuth. Enables users to query playlists.

Experience

Software Engineer Tutor	Feb 2020 – Present
Tokyo Coding Club & FDS Services	*Tokyo, Japan*

- Teaching students on software engineering practices and the fundamentals of **Python** and **OO** design.

Data Analyst Manager	Nov 2018 – Nov 2019
United Parcel Service (UPS)	*Sandy Springs, GA*

- Migrated my team's reporting stack to an automated workflow.
- Created dashboards to analyze and aggregate metrics in my division; led to the automation of reports.
- Implemented automated reporting applications by designing and rewriting SQL database tables to feed more than 500,000 data entries into VBA and Python applications.
- Led and coordinated inter-team reporting, streamlining other teams' workflows; Reduced average reporting workload from 3 hours to 3 minutes using applications I wrote in Python (Pandas, SQLite).
- Developed software and mentored peers on three teams using Python, MSQL, and VBA.
- Finalists in the UPS upstart startup program; coordinated with a multi-national team to present how encryption technology could impact UPS. Member of the UPS mentorship program.

Technical Skills

Languages: Java, Kotlin, Python, C, C++, Go, SQL, VBA, HTML/CSS, Bash
Frameworks & Libraries: Spring, JUnit, Gradle, Flask, Android, NumPy, Pandas, OpenCV, Swing, Tkinter
Dev Tools: Git, Agile, Google Cloud, AWS, VIM, Docker, Make, Linux, Unit Testing, LaTex
Misc: CFA LV 1, NLP, AI, API design, systems design, software architecture, equities, Math club, Seinfeld