David Majomi

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EDUCATION

Rutgers University: Bachelor's in computer science, May 2026 GPA: 3.5/4.0

Related Coursework: Linear Algebra, Machine and assembly, **Data structures and algorithms**, **OOP in Java, C** and **Unix Systems Programming.**

TECHNICAL SKILLS

- **IDE's and technologies**: Code Blocks, VS Code, **flask**., **GIT**, GitHub, VCPKG, make and makefile.
- **Languages and Operating Systems**: ***C++***, intermediate ***Python***, ***Java***, Windows, and Linux.
- **Databases: *E***xperience using **sqlite3** in both **Python** and **C++**.
- **Libraries**: Algorithm, thread, cmath, algorithm, mutex, filesystem, iostream, flask, and fstream.

Experience:

Freelance at Remotetask.com (2024 - present)

- Created and modified small programs in python for training AI models.
- AI Model output quality assurance, testing, and validation ensuring accuracy.
- Model output performance optimization and reporting enhancing further optimization and decision making.

CORE COMPETENCIES

- Mastery of programming standards and naming conventions.
- Strong understanding of data structures and algorithms, particularly STL containers and algorithms, and their performance trade-offs.
- Strong knowledge and experience in **object-oriented programming** and design principles.
- Understanding of **UML and class documentation** as well as **OOP - specific concepts**
- Familiarity with multithreading, parallelism, and latency reduction concepts, such as threads and RAII.
- Knowledge of advanced language features, including templates, and exception handling.

PROJECTS

Loan Management System Completed Features:

- Developed a loan management system, leveraging a server-client model, with a C++ backend encapsulated as a **dynamic-link library (DLL)** and integrated with a **Python socket** to optimize efficiency.
- Used **external APIs** to get **real-time economic data** to score applicants based on economic conditions.
- Designed a **Flask-based web application** on a local server to provide an alternative, user-friendly client interface.
- Implemented methods for in-depth analysis of stored data, enabling valuable insights.
    - Added methods for report generation after end-of-day processing.
    - Experimented with simple machine learning algorithms in python to predict loan acceptance scores and decisions with a mean square error of 5.07e-08.
- Utilized a CRUD-based SQLite3 database system using Python and C++ to manage data.
- Tracked code progression effectively using **Git and GitHub**, ensuring a streamlined development process.

C++ sqlite3 database abstraction:

- Built a C++ abstraction for the sqlite3 API to allow low-effort setup of sqlite3 databases for other projects.
- Implemented error handling mechanisms to ensure calling programs get meaningful error messages increasing reliability.

Extracurriculars:

J.P. Morgan Software Engineering Virtual Experience on Forage - March 2024

- Fixed broken files in the repository to make web application output correctly.
- Used JPMorgan Chase's open-source library called Perspective to generate a live graph that visualizes historical stock data in a clear and visually appealing way for traders to monitor.

Association for Computing Machinery (ACM):

- Participated and **won in the 2024 ACM Hackathon** where I used skills such as **communication**, **collaboration**, and **teamwork** to achieve certain program/design objectives alongside my team.