J. Alex Mina

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Education

Brown University – Providence, RI **May 2022**

- *B.S., Computer Science*
- *Related coursework:* Computer Systems, Linear Algebra, Computer Graphics, UI/UX, Probability Computing, Deep Learning, Discrete Structures, Topics in 3D Game Engines, Data Ethics
- *NCAA Division 1 Men's Soccer (Fall) and Men's Track and Field (Winter and Spring)*
    - *o* 30-35 hour/week commitment including travel, training, film study, meetings, and other obligations while managing a full courseload, work, and extracurricular activities.

Skills

Programming languages: : C++ (highly advanced), C (advanced), Python (advanced), C# (advanced), Java (advanced), GLSL/OpenGL (advanced), Javascript (intermediate), REACT (intermediate), Scala (intermediate), OCaml (intermediate)

Technology/Security Clearance: Unreal Engine (advanced), GitHub/GitLab (advanced), Linux (intermediate), Bash (intermediate), Jira (intermediate), extensive experience debugging, active Secret security clearance

Experience

Rite Solutions: Software Engineer – Remote **August 2024 - Current**

- Contributed to upgrading and maintaining a back-end, C++ training software communications program that utilizes CORBA/TAO and AMQP for messaging between different programs.
- Spearheaded a large refactor of a major component, combining two large over complicated testing programs into a single clean solution.
- Re-worked an entire time management system that is shared across multiple programs such that it was capable of fault restarts.
- Fixed numerous UI issues as well as other user reported bugs.
- Work in an Agile managed project where I attend regular standups, reviews and planning meetings.
- Review pull requests weekly from teammates.

Rite Solutions: Graphics Software Engineer – Bethesda, MD **January 2023 - August 2024**

- Built a back-end solution in C++ connecting a dynamic physics model to a graphical user interface using TCP/IP allowing accelerated data transfer and visualization.
- Created methodology using Python to import large data sets from a government proprietary database into a graphical simulation operated on Unreal Engine.
- Designed a complex overlay with real time metrics for a 3D simulation intended for defense training.
- Integrated a graphical simulation into a large client server system and enabled simulation accessibility on training equipment in a secure environment.
- Reviewed 50+ pull requests in C++ from teammates and worked directly with a modeling artist to apply arbitrary textures to objects at run time.

IDEMIA: Programmer II – Chantilly, VA **September 2022 – January 2023**

- Utilized a Java-like proprietary language in a collaborative and fast paced setting to parse both large pre-production and live datasets.

- Led check-ins with teammates, addressed debugging issues and managed changes made to the project's requirements.

Brown University: Head Teaching Assistant – Providence, RI **May 2021 – January 2022**

- Held office hours and help sessions for over 100 students taking an advanced Computer Graphics course (CS1230) to strengthen their understanding of the curriculum.
- Communicated with the professor and team of teaching assistants daily to grade projects and labs, assign tasks, revise lectures, and coordinate lab hours.
- Interviewed, hired, trained, and delegated to seven teaching assistants.

Self Employed: Computer Science and Math Tutor – Fairfax, VA **June 2021 – December 2021**

- Guided students' personal projects coding in C++ and Java as well as leading front and back-end development efforts in Python
- Set goals for students and improved their test scores and understanding of mathematical concepts.