Udom An

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EDUCATION

Virginia Polytechnic Institute and State University   **Aug 2023 - May 2024**
Master of Engineering, Computer Science   Blacksburg, VA
Virginia Polytechnic Institute and State University   **Aug 2019 - May 2023**
Bachelor of Science, Computer Science   Blacksburg, VA
Cumulative GPA: 3.91/4.0
Dean's List | Fall 2019 - Current
Relevant Coursework: Operating Systems, Data Structure & Algorithms, Computer Organization I & II, Cloud Software Dev, Multivariable Calculus, Discrete Math, Linear Algebra

EXPERIENCE

Virginia Tech   **Aug 2020 – Current**
Undergraduate Teaching Assistant   Blacksburg, VA
- Hosts daily office hours to address students' questions and debug C++ assignments.
- Monitors and participate in discussion boards and online class forums.
- Grades homework and projects for a class of 85 students.

PROJECTS

Record Squared   **Apr 2022– May 2022**
- Implemented a full-stack website in for users to document music albums.
- Used Spotify API to store album data in database for webpage display.
- Designed a diary system for users to update, review, and rate albums.

GIS Record Databases   **Mar 2021 – Apr 2021**
- Implemented an efficient OOP design to parse GIS files up to 70,000 records to create the database entries.
- Created a generic Hash Table and bucket PR Quadtree to index data of GIS records for efficient data retrieval.

Fork-Join Threadpool   **Nov 2021– Dec 2021**
- Engineered a fork-join threadpool for dynamic task parallelism capable of increasing speed of various mathematical workloads.
- Threadpool implemented upon future API which includes a work-stealing design that assumes fully strict models.

SKILLS

Languages: Java, Python, HTML, JavaScript, CSS, C++, TypeScript
Framework: Visual Code Studio, Angular, React.js, Node.js, MongoDB, IntelliJ, Git