Anurag Bangera

Canton, MI | (734)4319306 | abangera@umich.edu | /in/anurag-bangera/

Education:

University of Michigan: Rackham Graduate School August 2023 - May 2024
M.S.E Computer Science and Engineering Ann Arbor, MI

- Coursework: Distributed Systems, Advanced Compilers, Parallel Computing (HPC), HCI

University of Michigan: College of Engineering August 2020 - May 2023
B.S.E Computer Science: Magna Cum Laude (GPA: 3.72/4.0) Ann Arbor, MI

- Coursework: Operating Systems, Applied GPU programming, Data structures, Web systems, Intro to AI, Compilers, Intro Autonomous Robotics, Linear Algebra, Discrete Math
- Clubs: UofM Science Olympiad, MRun, Michigan Poker Club

Experience:

Michigan Medicine - *Ann Arbor, MI* July 2023 - Present
Student Software Developer

- Creating 10+ medical knowledge API implementations within the Knowledge Grid infrastructure system
- Developed and tested an activator for medical knowledge, enabling python development workflows for clients and reducing knowledge package sizes by over 25%

Shibumi (shibumi.com) - *Royal Oak, MI* May 2022 - August 2022
Software Engineering Intern

- Rewrote and optimized an entire service, upgrading from Java to Node.js and Typescript, resulting in a 50% reduction in processing time and memory usage
- Created a full-stack application to allow 15+ large clients to enable SSO capabilities with a simple UI, implemented with a ReactJS interface and a Java Spring Boot server-side implementation
- Updated the current SSO microservice to communicate through a Redis server, and to generate and refactor 100+ SAML setup files in AWS S3
- Expanded a testing suite using Jest to 90% coverage on multiple microservices, resulting in 5+ successful releases to the production kubernetes cluster

Yazaki North America - *Canton, MI* January 2022 - December 2022
University of Michigan MDP Student Project Team

- Acted as project manager to lead 20+ meetings with stakeholders to establish goals, scope, and requirements for designing, building, and testing an adaptive system to test wire harnesses
- Built and programmed a distributed microcontroller sensing network using Raspberry PI and ESP32s communicating over a CAN bus with 10+ nodes
- Developed a web UI using React and python, displaying harness status with <2s latency from input to interface
- Reduced errors in final harness by 30% and harness testing time by 90% in mock trials compared to older processes

Projects:

Network File Server

- Created a concurrent, distributed file server communicating with clients over TCP, utilizing a hierarchical file system, socket programming, and network protocols

Instagram Clone

- Deployed a functional Instagram clone webpage with client-side rendering and a MySQL database to AWS

Skills

C++ | C | Javascript | Python | REACT | SQL | Java - Spring | Matlab | Git | AWS | Typescript | CUDA