HEMANG DASH

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Education

Georgia Institute of Technology, Atlanta, GA, U.S.A.
- ○ **M.Sc.** in Computer Science (Computing Systems) — *Expected Graduation: May 2024*
- ○ **B.Sc.** in Computer Science (Threads: Systems & Architecture, Intelligence) | **GPA: 3.88** | *May 2023*
- ○ **Relevant Courses**: Distributed Systems, System Design for Cloud Computing, Advanced Operating Systems, Compilers & Interpreters, Processor Design, Database Systems, Mobile Computing and IoT

Experience

Georgia Tech, *Graduate Teaching Assistant (Advanced Operating Systems)* — *Aug 2023 – Present*

Prog. Languages & SWE Group, Georgia Tech, *Research Assistant* — *May 2023 – Present*
- ○ Engineered and established a robust infrastructure to systematically identify and diagnose bugs in LLDB's behavioral performance across diverse compilation optimization levels.

Meta, *Software Engineer Intern* — *May 2022 – Aug 2022*
- ○ Revamped Meta Business Suite's Brand Safety Hub Overview using React, Hack, GraphQL, and Relay to ensure brand safety on all Meta platforms while simplifying ad placement.
- ○ Spearheaded the adoption of GraphQL over GraphAPI, resulting in a 15% improvement in load times, increased flexibility in data retrieval, and improved code quality.
- ○ Recognized as the fifth highest contributor in Facebook Integrity's code hub.

EPL Surveillance Group, Georgia Tech, *Research Assistant* — *Jan 2022 – May 2022*
- ○ Analyzed workload to test enabling a FaaS platform to operate efficiently over a geo-distributed continuum of edge clusters, to serve requests and avoid any one edge-cluster from violating latency requirements.
- ○ Utilized a SUMO script to generate random activity of vehicles in a city over a period of 36 hours and assigned each vehicle to an edge site closest to it using the Euclidean distance heuristic.

Georgia Tech, *Undergraduate Teaching Assistant (Computer Systems and Networks)* — *Aug 2021 – Dec 2022*

NCR Corporation, *Software Engineer Intern* — *May 2021 – Aug 2021*
- ○ Designed and implemented an Angular solution in .NET Core that eliminated manual customer information transformation, resulting in a 10x faster onboarding process.
- ○ Developed an Angular-powered solution in .NET Core to enable NCR Marketplace's sites to be validated against various tax services, enhancing the user experience.
- ○ Led refinement sessions and introduced gamification for intern engineers, enhancing sprint productivity by 25%.

Projects

Community Willingness and Capability Score (CWCS), *iParametrics, LLC* — *Aug 2022 – May 2023*
- ○ Web app built using React, Jupyter, Azure SQL and Python Flask that shows the CWCS of different communities in the US, computed using an ML algorithm to determine strategic and equitable investments in disaster mitigation efforts.

vCPU Scheduler and Memory Coordinator — *Sep 2022*
- ○ Scheduler built in C that tracks virtual CPU utilization of VMs and load balances them across physical CPUs.
- ○ Memory coordinator built in C that tracks each guest machine's memory utilization and decides how much extra free memory should be allocated to each guest machine using the balloon driver.

Musical Motors — *Jan 2021 – May 2021*
- ○ Device with a motor, breadboard and software powered by Assembly and Altera Quartus to play custom notes at different octaves and a song using the position and velocity control of the motor.

UniT (University Tomorrow) — *Jun 2020 – Aug 2020*
- ○ Mobile app containing an extensive database using ML algorithms to filter university data from a REST API and custom widgets and layouts in Flutter to enhance user experience.

Extra-Curriculars

India Club at Georgia Tech, *President* — *Apr 2022 – Apr 2023*
- ○ Managed the largest student-run organization at Georgia Tech by leading a board of over 70 members.
- ○ Corresponded with University Administration and the Student Government Association for increasing outreach, maximizing the number of events, and serving the needs of thousands of people.

Skills

Computer Languages: Java, Python, C, C++, JavaScript, Hack, GraphQL, SQL, Assembly, HTML5, CSS, VHDL
Frameworks/Platforms: AWS Lambda, DynamoDB, Amazon EC2, Amazon S3, Azure SQL, Docker (Containers), React, Python Flask, GitHub, Angular, .NET Core, Flutter, Firebase, Altera Quartus, Microsoft Office, LibreOffice, Android Studio, Jupyter

Certifications

- ○ **AWS Certified Developer – Associate** | Amazon Web Services (AWS) | *Aug 2023*