UMANG GUPTA

☐ +65 93790540 | ✓ umanggupta1103@gmail.com | ⊕ umangpt.com | ☐ linkedin.com/in/umangguptacs | ☐ github.com/Usgupta

EDUCATION

Singapore University of Technology and Design | GPA 4.46/5.0, Honors List

Sept. 2020 - May 2024

Bachelor of Engineering in Computer Science, Minor in Artificial Intelligence

Stanford University | International Honours Programme

Jun 2023 - Aug 2023

Relevant courses: Data Structures and Algorithms, Operating Systems, Concurrency, Database, Networks, Machine Learning, Artificial Intelligence, High Performance Computing, Data Science

Certification: (Pursuing) Google Machine Learning Engineer

WORK EXPERIENCE

Grab Jan 2023 – May 2023

Software Engineer Intern | Kotlin, RxJava, Dagger, TCP, Android Studio, Git

- Reduced Grab Driver Android app debugging time greatly with a custom TCP socket message logger
- Boosted Grab Driver activity through complete Android development of an incentivization feature.
- Participated in Grab-a-thon to increase Driver jobs by manipulating the matching algorithm to change filters after a period

Projects

9 Bytewallet | NextJS, NodeJS, Vercel, Stripe, Postgresql

 $Sept\ 2023-Sept\ 2023$

- Designed and implemented a robust user registration and authentication system, ensuring data security.
- Successfully integrated Stripe payment gateway for seamless user top-ups.
- Contributed to the development of peer-to-peer transaction functionality, enhancing user experience.
- Led the design and implementation of the transaction history feature for user transparency.

ℰ RDTonUDP | Python, Networking, TCP/UDP, Git

Sep 2022 - Oct 2022

- Designed and implemented a congestion-controlled, pipelined RDT protocol over UDP, enabling secure text file transfer across unreliable networks.
- Achieved 0 crashes, tested on multiple different remote linux machines
- **Dygnostic** | Ruby on Rails, JS, HTML, Python, GCP, Postgresql, React, Cucumber, Rspec May 2022 Aug 2022
 - Led a team of 6 to develop a web app to automate TSH Group's machine inspection to attain 30% time reduction
 - Utilised Cloud Vision to automatically analyze quality of label on the machine components
 - Recognized as the best architecture for implementing REST APIs and microservices
 - Followed BDD and TDD, succeeded as the best tested software in 15 projects by conducting unit and e2e testing

Shell | C/C++, Git

Jun 2022 – Jun 2022

- Created shell to find files, change directory, count lines, check daemon processes and show available commands
- Succeeded as the fastest coder to create shell in 12 hours among 250 students with no crashes from auto-testing

▶ **VoiceBus** | Swift, IOS, Machine Learning, Git

Dec 2021 - May 2022

- Led a team of 4 under Apple Engineer to develop a full-stack IOS voice enabled bus info app for visually impaired
- Fine-tuned text-to-speech and speech recognition engine
- Succeeded as the only app to receive positive user feedback, and publish on App store
- Winner of Swift Inclusive App Development Hackathon 2022

AWARDS & ACCOMPLISHMENTS

The Jyoti and Aditya Mathur Environmental Award

SUTD

Organised SUTD's first sustainability design thinking hackathon with SG Minister as Guest of Honor

Mar 2022

The Design and AI in the Data Driven World Challenge

SUTD X DBS Sept 2021

Won 500 SGD in pitching an AI powered credit card recommendation engine in Paylah App

REFERENCES

𝚱 Steve Jones | Director, High Performance Computing Center (HPC) @ Stanford

HPC Course Professor

ℰ Gokul G | Software Engineer Manager II @ Grab

Manager

Natalie Agus | Senior lecturer @ ISTD, SUTD

Core CS Professor