

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 by 45% with a custom TCP socket message logger
- Boosted Grab Driver activity through complete Android development of an incentivization feature.
- Actively participated in Grab-a-thon to increase Driver jobs by manipulating the matching algorithm to change filters after a period

PROJECTS

🔗 **HPC-Enhanced Animation** | Python, Rocky Linux, Slurm, Docker, Anaconda Jul 2023 – Aug 2023

- Orchestrated integration of animation research from Meta's into Stanford's High Performance Computing cluster
- Setup the complete cluster from installing OS to setting up compute and master node

🔗 **RDTONUDP** | Python, Networking, TCP/UDP, Git Sep 2022 – Oct 2022

- Designed and implemented a robust, congestion-controlled, pipelined RDT protocol over UDP, enabling secure text file transfer across unreliable network
- Successfully achieved zero crashes in extensive testing on various remote Linux machines

🔗 **Dygnostic** | Ruby on Rails, React, Python, Google Cloud, Postgresql, 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
- Developed the best architecture for implementing REST APIs and microservices, recognized as the best-tested software in 15 projects through rigorous unit and e2e testing

🔗 **Shell** | C/C++, Linux, 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

📺 🔗 **FDM5K** | Alchitry, Lucid, FPGA, Git Feb 2022 – Apr 2022

- Led a team of 8 to develop a hardware game inspired by Bishi-Bashi arcade game
- Won 5th place among over 200 students for hardware quality, effectiveness of datapath, complexity of game

🔗 **Who Wants to be a Millionaire** | C++, Git Sep 2019 – Oct 2019

- Developed an online version of "Who wants to be a millionaire" using C++
- Recognized as top 5 C++ projects among 150 students

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
Won 500 SGD in pitching an AI powered credit card recommendation engine in Paylah App Sep 2021

REFERENCES

🔗 **Steve Jones** | Director, High Performance Computing Center (HPC) @ Stanford HPC Course Professor

🔗 **Gokul G** | Software Engineer Manager II @ Grab Manager

🔗 **Natalie Agus** | Senior lecturer @ ISTD, SUTD Core CS Professor