UMANG GUPTA

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EDUCATION

Singapore University of Technology and Design   Singapore
Bachelor of Engineering in Computer Science and Design, Minor in Artificial Intelligence   *Sept. 2020 – May 2024*
GPA 4.46/5.0, SUTD Honors List
Available full time from Jan 2023 - Sept 2023
Relevant courses: Data Structures and Algorithms, Operating Systems, Concurrency, Database, Networks, Machine Learning, Artificial Intelligence

WORK EXPERIENCE

Researcher | *Solidarity, Blockchain*   Oct 2021 – Mar 2022
Singapore University of Technology and Design X Singapore Mentorship Committee   *Singapore*
- Researched on Network Design and Performance in Blockchain Networks and its impact on user and developer trust for decentralized applications
- Recognized as the best research team out of 5 rival teams for finding business opportunity with professors from SUTD and mentor from MIT

PROJECTS

Dygnostic | *Ruby on Rails, JavaScript, HTML, Python, GCP, Postgresql, React, Git*   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

Secure File Transfer | *Python, Cryptography, Git*   Jul 2022 – Aug 2022
- Implemented a secure file upload application from a client to a secure file server ensuring Confidentiality, Integrity, Authentication and Preventing Replay Attack
- Won best program award out of 250 students for fastest secure encrypted file transfer

Shell | *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 to develop a full-stack iOS voice enabled bus information app for the visually impaired
- Applied machine learning to create text-to-speech and speech recognition engines for the app
- Succeeded as the only app to receive positive user feedback, and to publish the app on App store
- Winner of Swift Inclusive App Development Hackathon 2022

HawkerGO! | *Java, Android, Google Firebase, Git*   Feb 2022 – Apr 2022
- Led a team of 6 to develop a full stack Android application, to view and review hawker stalls and hawker centres in Singapore supporting local stores not available on Google Maps
- Ranked 4th among over 200 students for innovation and architecture of the app

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

CO-CURRICULAR ACTIVITIES

Software and Electronics Engineer | *Altium, Soldering*   Feb 2021 – Jun 2022
SUTD Ringcomm Club   *Singapore*
- Created a smart watch software replacing student campus access card and payment bank card
- Designed a decryption NFC Reader that can read and decrypt MIFARE IDs to replace student campus card
- Experimenting on NFC architecture to ensure robust short-range NFC reception with small antennas

AWARDS & ACCOMPLISHMENTS

The Jyoti and Aditya Mathur Environmental Award   SUTD
Received for organising first sustainability themed design thinking hackathon of SUTD with 200 applicants   *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   *Sept 2021*