

Personal Statement

I am a young, motivated and ambitious student currently in my sophomore year studying computer engineering with a second major in innovation and design at the National University of Singapore. My dream is to be able to have my own successful start-up company one day. Although I am aware that start-ups are a tough place to be in, however the potential of the impact they can make to society and myself really excites me. I draw my inspiration from the founder of the Tata conglomerate, Jamsetji Tata and Jack Ma. These two figures have always held their belief and conviction strong that their goals can succeed despite adversities. Not many will know this, but before the Tata conglomerate became the renowned global company it is today, over 100 years ago, one man dreamt of four goals – “setting up an iron and steel company, a unique hotel, a world-class learning institution and a hydro-electric plant”. That was Jamsetji Tata. He attained 1 of his goals during his lifetime, while the rest were attained by his successors over a century. However, it's his vision and legacy that truly inspires me. Jack Ma on the other hand, got rejected by over 30 jobs, yet did not let life define his legacy and kept trying until his breakthrough came about via Alibaba. Their legacies has inspired me to try and write my own, and I have been working on that through every project or venture I get involved in. I see start-ups as the ideal place for a person like me, to work for something new and challenging, but extremely fulfilling when you see your vision come to life and serving others to make this world a better place than the day before.

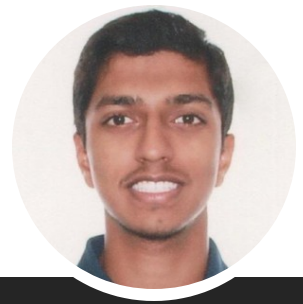
Being curious and pushing myself to my limits has always been a part of my life. Coupled with an innate desire to want to serve and contribute to a better world, I always try to be involved in projects contributing to the society.

One such project I have done is FITMATE, an android application aiming to encourage a culture of exercising. The application allowed users to record themselves doing push-ups, sit-ups or squats and then be able to send video challenges to peers. Implementing this idea was a challenge for me and my project partner as we had to self learn React Native, JavaScript, HTML, CSS, pick up design concepts and also learn to manage an online database all within a short summer. Other than being my first exposure to software engineering, it was also the first time I had to consider the user's perspective in order to ensure that my software is both intuitive to use and matches the user needs. My pair was mentored by industry mentors from Thoughtworks who brought us through the software design process in and also introduced testing frameworks. It was different from projects done in school, where simply getting the app to work was sufficient, instead we spent most of our time ensuring code style was consistent, writing test codes and improving the user interface. Writing test codes especially appeared to be a massive chore but very soon I learnt to appreciate its importance when we added new features and the code bugs began emerging. I have been actively participating in Hackathon and competitions to build my experiences and technical competency, however this project was truly the highlight of my experiences so far in terms of my technical exposure to software engineering as it brought me through the slow and iterative process in development.

In line with my vision to want to contribute to a better world, I have also tried putting to use the skills I currently have on real-life projects. For instance, I participated in a service project in Bali, Indonesia, where our team developed a website for a Balinese village with abnormally high deaf and mute population. Our website displayed the unique culture of the village as well as promoted the villagers' homes for a paid homestay experience. For me this was my first exposure working with non-technical stakeholders and attempting to meet their expectations. For instance, my team had used an API to direct customers to a payment portal which allowed payments to be received on a group bank account, however, the village representatives did not like this setup as they did not have a group bank account and preferred payment to individual accounts of the villagers. However, we battled time pressure as their demand constituted a major change which would not be feasible before our departure and hence we had to negotiate to reach a compromise whereby we disabled the online payment until the villagers obtained a group account and add a cash payment option as an interim measure. It was a stressful experience for my team, but it allowed me to appreciate how important early communication with the stakeholders is in order to maximise user satisfaction and productivity.

I hope that an internship in silicon valley will further expand my experiences and allow me to understand the start-up ecosystem before I return to Singapore and implement what I have learnt. I have a few personal objectives that I hope to accomplish through my opportunities there. On the technical front, I hope to gain experience with more development frameworks and tools as well as undertake projects with new software paradigms. Design wise, I am really curious to learn how good ideas are generated and financial and technical considered before committing to an idea. Finally, I am keen to find out how to successfully propose and pitch to investors and also how to best manage interpersonal and professional relationships in a small team working environment.

I have always been convicted that whatever I take up, I must do “my best”. This is inline with the Scout promise – “On my honour, I promise that I will do my best...” which has been a key driver of my motivation. Working in a start-up presents a great opportunity to learn and grow as well as make a positive difference to our community. As such, I am eagerly looking forward to a chance to participate in change making and I strongly believe that interning in a Silicon Valley start-up will allow me to do just that.



EDUCATION

Computer Engineering 2018 — present
National University of Singapore

Bachelor of Engineering (Computer Engineering) with Honours and Second Major in Innovation & Design

Relevant Modules:

- Software Engineering with Object Oriented Programming
- Digital Design
- Real Time Operating Systems
- Programming Methodology
- Discrete Structures
- Cyber Security

PROJECT EXPERIENCE

Lab Inventory Management System 08/2019 — present
Java | Java Fx

- CLI based inventory management system aimed at lab technicians to facilitate easier management of stocks, loans and lost counts

Fitmate 05/2019 — 08/2019
React Native | Tensor Flow | Firebase

- Android Fitness Application (available on the Google Play store as Fitmate)
- Allows users to send video challenges to peers of them doing push-ups, sit-ups or squats
- A computer vision enabled machine learning algorithm periodically verifies the count of the number of repetitions

AI Enabled CCTV Camera 06/2019 — 09/2019
HTML | CSS | Tensor Flow | Python

- Developed AI enabled software to automatically detect motor vehicle accidents and alert emergency operator

FPGA Audio Visualiser 01/2019 — 05/2019
Verilog

- FPGA rendition of flappy bird game, frequency detector and interactive Audio Visualisation coded in Verilog for the Basys3 FPGA

Autonomous Remote Sensing Bot 01/2019 — 05/2019
C | C++ | ROS

- Team Project involving Arduino Based Movement Control and SLAM operations on Raspberry Pi 3, to operate a remotely controllable search and rescue bot

ACHIEVEMENTS

First Runner Up 02/2019
EnlighteNUS IEEE Hackathon

- Built an educational game using Unity and C# aiming to gamify educational quizzes for primary school students within 19 hours

ACHIEVEMENTS

National Youth Achievement Award (Gold) 10/2018
NYAA Council

- Premier youth award given by the President to encourage young people to develop self-reliance, perseverance and a sense of responsibility to themselves, to society and to nation

VOLUNTEER EXPERIENCE

Chairperson, National Rover Council
Singapore Scout Association

- Youth body responsible for the national level management of the Rover section (17 - 26 yrs old) in the Singapore Scout Section

Vice Chairperson
OCBCcares Environment Fund (Project Sarimbun)

- Pitched and won \$25,000 dollars to finance reforestation and environmental education project

SKILLS

Development

HTML, CSS
React Native



Version Control

Git
Github

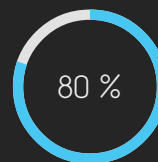


Microcontroller

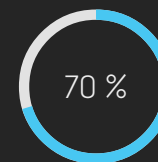
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Verilog



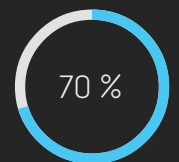
PROGRAMMING LANGUAGES



C, C++, C#



Java



Python

SOCIAL MEDIA



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