## Yustynn Panicker

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### **PERSONAL PROFILE**

Frequent hackathon winner with numerous side projects. Competent in numerous technological fields. Strong analytical skill and coding ability, particularly in fullstack web development and data analysis. Keen on solving problems, has extensive leadership and training experience. Interests in rational fiction, philosophy and productivity.

### **SKILLS SUMMARY**

### Fullstack Web + Mobile App Development

Node & Express, MongoDB, SQL, React & Redux, React Native, Sass, JavaScript (ES6), HTML5+CSS3

### **Data Processing + Web Scraping**

R (Tidyverse), Python (NumPy, Pandas, BeautifulSoup, Matplotlib)

#### Miscellaneous

Bash, Vim (preferred text editor), Linux, Sketch, InVision, LaTeX

### **EDUCATION**

## Singapore University of Technology & Design (SUTD), BEng (Hons)

May 2016 - Aug 2019 (Expected)

- SUTD: Established in 2009 in collaboration with Massachusetts Institute of Technology (MIT)
- Engineering Systems and Design bachelor's degree, with specializations geared towards optimization
- University Undergraduate Merit Scholar, with fully covered school fees
- Expected by university to graduate magna cum laude

## Aalto University (in Helsinki, Finland), Computer Science Master's Exchange Studies

Sept 2018 – Dec 2018

- Selected for a Master's level exchange program, despite being a Bachelor's student
- Courses included topics such as Algorithmic Techniques of Data Mining, Complex Networks and Modelling and Simulations

## Massachusetts Institute of Technology (MIT), Innovation and Entrepreneurship Bootcamp Feb 2018 – Feb 2018

- Intensive week-long program, coached by MIT Lecturers and leadership/startup/corporate experts
- 130 participants selected from 41 countries, out of pool of 1600 applicants
- Won 3<sup>rd</sup> place in pitching contest (out of 26 teams)

# Fullstack Academy of Code (in New York, USA)

Nov 2015 – Feb 2016

- Immersive coding bootcamp for fullstack web development (with the MEAN stack), 7% admission rate
- Spent 12h a day for 3 months learning and practicing fullstack web development
- Elected Head of Hackathons: organized and led cohort's attendance of hackathons across several US states
- Stayed on as a Teaching Fellow after the course ended (less than 1 in 5 graduates offered the fellowship)

## **WORK EXPERIENCES**

### Teralytics, Data Scientist Intern (Singapore and Zurich, Switzerland)

May 2018 – Aug 2018

- Teralytics: Switzerland-based company providing advanced insights on human mobility
- Worked in Scala, Python, R and JavaScript (React.js) in order to build deliverables
- Single-handedly developed the front-end of a major dashboard for country-scale transport authority
- Built near-realtime data pipelines with Flink
- Wrote scripts to mass-modify configuration JSON for Grafana

## **Xfers, Software Engineering Intern (Singapore)**

May 2017 - Jul 2017

- Developed with Ruby on Rails and React.is, with bug fixes and features frequently integrated into production
- Played key role in determining overall frontend architecture, focused largely on the transition *from Embedded Ruby* to *React.js*

## Fullstack Academy of Code, Teaching Fellow/Software Engineer (New York, USA)

Feb 2016 - May 2016

- Worked on proprietary Learning Management System, built in the MEAN stack
- Led group of 5 members in agile practices while they developed an ecommerce store from scratch
- Led over 20 people in coding challenges weekly
- Provided teaching support by directly addressing concerns during lessons

## Singapore Armed Forces Armoured Infantry Battalion, Platoon Sergeant (Singapore)

Feb 2013 - Dec 2014

- Selected for Command School after Basic Military Training
- Trained in an assortment of skills including armored vehicle driving, numerous weapons and CPR
- Commanded the main armored vehicle in a company 120 people strong
- Led a platoon of 15 and in-charge for company-wide administration

## Mercari Eurohack 2018, Second Prize Winner

Oct 2018

- Team leader and 2<sup>nd</sup> prize winner, beating ~28 other teams
- Developed an algorithm to determine an actor's trustworthiness on sharing economy platforms before their first transaction (cold start problem)
- Implemented algorithm in NetworkX (Python) and d3.js force directed graph for visualization of algorithm
- Won €2,500 and a trip to Japan

## Singapore Airlines (SIA) App Challenge, Grand Prize Winner

Oct 2017

- Grand prize winner for Student Category, beating 150 other teams in a team of 4
- Created proof-of-concept solution to track emotion in interview videos & process speech, in order to automatically assess job applicants during preliminary interview rounds
- Won a trip to Silicon Valley, met companies including Red Hat and Heroku, chaperoned and sponsored by SIA

### Techfactor Challenge 2016/2017, Winner

Dec 2016 - Sept 2017

- TFC: Year-long entrepreneurship/technology competition by ST Electronics & Spring Singapore (government organizations) to develop products for improving the lifestyles of the elderly
- Developed modular wheel attachments to improve elderly walker mobility, while fitting into existing devices
- Took charge of business strategy
- Champion team, won \$29,000 with 4 other teammates

### Angelhack Singapore 2017, CityConnect Challenge Winner

June 2017

- Solo effort, designed and developed a cross-platform mobile app with Sketch, InVision and React Native
- Application for developing countries with limited ATMs. Uses others' wallets as distributed cash-storage facilities
- Won \$1,000 + entry into Australia's largest Startup Accelerator

### **LEADERSHIP APPOINTMENTS**

## Official University Degree Representative (Engineering Systems and Design, SUTD)

Sept 2017 - Present

- Elected through popular vote to represent ¼ of the Class of 2019 student body
- Liaison between faculty and staff and students, ensuring course quality and student welfare
- Organizing events for the entire degree program, including staff, faculty and graduate students

### Head of Workshops @ What the Hack

Sept 2016 - Oct 2017

- What the Hack: SUTD's inaugural nationwide hackathon, with 175 participants and >\$20k in cash funding
- Led subcommittee of 4, as well as shaped overall direction of hackathon in executive committee
- Sourced for and organized 6 workshops for participants on Open Data, Arduino, Computer Aided Design, Design Thinking, Entrepreneurship, and Hacking Hackathons

## **SELECTED PROJECTS**

## **Augmentation of SUTD's Learning Management System (Blackboard)**

Aug 2016 - Present

- Self-initiated, designed and developed single-handedly as a chrome extension for SUTD students
- Currently used by 25% of the SUTD's entire undergraduate population
- Adds batch download functionality to download all course/folder materials & aesthetic improvements
- Technology Used: Chrome APIs, JavaScript

#### **Room-Scale Reactive Lighting Project**

Jan 2018 - Apr 2018

- Led team of 5 to develop room-scale lighting that changes with the pitch & loundness of sound in a room
- Developed socket server and audio processing code in order to encode sound values as lighting values
- Technology Used: Raspberry Pi, Python, Neopixels

## **Event-Based Queueing Prediction Modelling for DBS Bank**

Sept 2017 - Dec 2017

- Project for DBS Bank to predict how events such as weather and train breakdowns affect
- Developed multithreaded web scraper and parser to gather data using Python
- Used web scraping, clustering and visualization to tie users to age and gender demographics
- Technology Used: Python (Pandas, Matplotlib, Requests, threading, etc), SQL

## Holographic 3D Graph Visualizer, Controlled Through Hand Movements

Oct 2016 – Dec 2016

- Single-handedly designed and developed software for visually rendering any 3D function as a graph, as well as
  for rotating and translating the view of the graph using hand movements
- Technology Used: Unity3D, C#, Leap Motion

# Girder Gus Online Platformer Game (www.girderg.us)

Jan 2016

- An original platformer game, level editor and social platform developed from scratch purely with JavaScript
- Developed much of the core game, level editor and API server
- Implemented 'ghost' feature in all levels, allowing players to race against their older playthroughs
- Technology Used: PhaserJS, MEAN Stack