

## EDUCATION

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### National University of Singapore (NUS)

Aug 18 – Present

- Bachelor of Science (Hons.) in Business Analytics, Minor in Economics and Statistics
- Current GPA: 4.75 (First Class Honours), Dean's List AY19/20 Semester 2, AY20/21 Semester 1
- Expected Date of Graduation: **May 2022**
- **Dissertation** – Working on privacy preserving machine learning under Prof Reza Shokri.

### NUS Overseas College, Indonesia, Bandung

May 19 – Aug 19

- Gained insights into the start-up culture and ecosystem in Indonesia through active participation in networking sessions with business leaders, start-up founders and colleagues.

## WORK EXPERIENCE

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### Data Intern, Carousell

Jun 21 – Present

- Created multiple internal analytics dashboard in Looker to allow the teams to track key business metrics and perform in depth analysis.
- Modified data pipelines to allow for easier analysis and to reflect new data metrics.

### Data Analyst, Regional Business Development, Shopee

Jan 21 – Jun 21

- Worked on a product pricing model to analyse the pricing and sale information to obtain a price elasticity curve. Performed various tests and resulting profit maximising price changes led to monthly revenue increase of 100k.
- Created a sales forecasting model on a per product level for all the major marketing campaigns on the platform in South East Asia, beating local models by over 20% on key metrics.
- Modified replenishment logic leading to a 10% reduction in inventory value.
- Standardised and automated reporting workflows using Pandas, Xlsxwriter and Airflow.
- Performed database validation checks and modified columns based on new business logic.

### Data Analyst, Machine Learning Operations, Visenze

Aug 20 – Dec 20

- Curated specific datasets and evaluated the various image recognition models using a standardised baseline, improving model performance by 2%.
- Analysed issues in the performance of models and innovating new ways to tackle them.

### Machine Learning Analyst, NUS Fintech Society

Aug 20 – May 21

- Worked on a project to develop a stock trading OpenAI gym to allow the easy implementations and testing of various reinforcement learning algorithms.

### Deep Learning Research Intern, National University of Singapore

May 20 – Jul 20

- Worked on multi-task multi-optimisation algorithms for deep learning in PyTorch.
- Integrated different state of the art models/optimizers (DCMF, Eposearch, MGDA, gCMF) for multi-view heterogeneous data sources from research papers and performed baseline experiments.
- Implemented machine learning models for predictions based on healthcare data (MIMIC 3).

### Teaching Assistant, National University of Singapore

Jan 20 – Present

- **Orbital, Senior Project Adviser:** Overseeing 15 teams and mentoring them to develop their projects with sound software development principles.
- **Research Assistant, IS4241 Social Media Network Analytics:** Performed data collection and feature engineering to craft 3 datasets for graph network visualisation & analysis with Gephi, Python & R.

- **Introduction to Python Workshop:** Helped conduct a 3 day workshop for freshmen with no prior programming experience.
- **C1231 Discrete Structures:** Conducted weekly tutorial for over 20 students. Covered basics of discrete mathematics including, propositional logic, proofs, relations and functions, sets and graph theory. Graded quizzes and assignments, alongside the Professor.
- **BT1101 Introduction to Business Analytics:** Weekly consultations and tutorial grading. Helped conduct weekly coaching sessions for 10-12 students for the tutorial questions.

#### **Back End Developer, 9cv9**

**May 19 – Aug 19**

- Collaborated on a job search platform, built with Django and REST API to develop features like OAuth sign in for users, single click multi-platform job posting, resume parser, etc.
- Developed basic machine learning methods, allowing users to gain better job recommendations and allowing employers to find the right applicant based on the required skills.

### **PROJECTS**

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#### **Cheatsheet Maker – iNTUition 2021 – First Runner Up, Open Category**

**Feb 21**

- Developed a web application that helped to create the most compactly packed cheat sheet from a series of screenshots using a modified bin packing algorithm to help obtain the final output.
- Integrated a text detection and text sizing computer vision model to help resize the images so that each image would have the same font size.

#### **Breast Cancer Prediction – LifeHack 2020 – Champion**

**Jul 20**

- Attained top prize in the Singapore wide healthcare analytics and visualisation hackathon.
- Developed an ensemble model using logistic regression and Resnet18 CNN model for breast cancer detection.
- Designed Tableau dashboard to raise awareness for breast cancer in Singapore context.

#### **NUSPlanner – Web Application**

**Feb 20 – Apr 20**

- Led a team of 6 to build a web application for NUS students, to provide a seamless online planner linked to the modules taken, using Vue.js framework for front end and Firebase for backend.
- Went through entire software development life cycle from understanding user requirements, to continuous integration and user testing, while following scrum methodologies in each sprint.

#### **Calendar Bot – NUS Hack n Roll 2020**

**Jan 20**

- Built a telegram bot integrating text messages sent to it with a user's Google Calendar.
- Used NLP to process the message being sent by the user and API calls (after OAuth) to link to user's calendar.

#### **Event Management System**

**Jun 19 – Jul 19**

- Built an event management system, based on Django REST for backend and basic HTML5 and CSS for front end, to be used in conjunction with the main job search platform of 9cv9.

### **ADDITIONAL INFORMATION**

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- Fluent in English, Hindi and Gujarati (both spoken and written).
- Sports: Participated in Inter College Game for Ultimate Frisbee and Dodgeball.
- Served as Co-President of Tembusu Debate Team, to organise weekly trainings and plan for competitions in Singapore and Malaysia.
- Technical Skills – R, Python, PyTorch, SQL, Django, Flask, Java, Tableau, TensorFlow, Rest API, Excel, Spark, Airflow, Looker, BigQuery, Vue, Project Management, Adobe XD