Yuan Bo Chen

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

BComp in Computer Science
University Scholars Programme
Expected May 2022 | Singapore
Cum. GPA: 4.5 / 5.0
Major GPA: 4.625 / 5.0

RAFFLES INSTITUTION

Singapore-Cambridge GCE A Levels
Grad. Dec 2015 | Singapore
University Admission Score : 87.5 / 90
Vice-Captain of Judo Team
National Inter-School Judo Champion

GENERAL ASSEMBLY PART-TIME DATA SCIENCE COURSE

Grad. Oct 2017
Gained skills in machine learning, algorithms, data modeling, Pandas, Sk-learn, Seaborn, XGBoost, imbalancedlearn.

OFFICER CADET SCHOOL

Grad. Dec 2016 | Singapore
Vocation: Infantry
Trained to lead a platoon for combat in jungle warfare, urban operations, and area security operations.

LINKS

Github:// ybchen97
LinkedIn:// yuan-bo

COURSEWORK

UNDERGRADUATE

Programming Methodology I & II
Data Structures & Algorithms
Computer Organisation
Linear Algebra I

SKILLS

PROGRAMMING

Experienced:
Java • JavaScript

Familiar:
C++ • Python • C • Rails • HTML • CSS • React

PROJECTS

ORBIBOY

May 2019 - Aug 2019 | NUS Orbital 2019
- Built a functional **GameBoy Emulator** that runs on all modern web browsers.
- Emulator is written completely in **C++**, using **SDL2** for grahics rendering, and then compiled into **WebAssembly** via **Emscripten** to be used together alongside **JavaScript APIs** on the webapp.

GROUPSKETCH

Jan 2019 | Hack&Roll 2019
- Android multiplayer drawing game developed using **Processing**.
- Implemented the drawing mechanism and all game buttons.
- Made in 24 hours during Hack&Roll 2019 hackathon.

SUMOBOT CONTEST

Sep 2018 | National University of Singapore
- Designed and built an autonomous robot with Lego Mindstorms EV3 that pushes other robots out of a preset arena.
- Achieved **top 8 out of 40** other participating teams.

SELF-DRIVING TOY CAR

Feb 2018 – Present
- Making a toy car learn how to drive by itself through machine learning.
- Learned how to hook up a basic breadboard circuit to control the car engines, ultrasonic sensors and a camera with a raspberry pi.
- Set up a simple **UDP server** to receive driving commands from a laptop keyboard.

VOUCHER PURCHASE PREDICTION

Oct 2017 | General Assembly, Singapore
- Predicting voucher purchases from online reservations made through a online restaurant reservation service.
- Cleaned and parsed raw data for data analysis.
- Used **logistic regression** and **XGBoost** models for prediction.

EXPERIENCE

TEACHING ASSISTANT for Programming Methodology I

Aug 2019 – Present | National University of Singapore
- Teaching assistant for **CS1101S**, a introductory programming course that is based on **SICP**.
- Conducted **weekly tutorial sessions** that teach students in computational thinking and programming as an undergraduate computer science major.
- Students learn in a gamified environment that is based off Star Wars, through progressively harder assignments and challenges.

NATIONAL CADET CORPS | Training Coordination Officer

Dec 2016 – Nov 2017 | Singapore
- In charge of planning, overseeing, and organizing military-related activities for Secondary, JC, Poly, ITE students, Teachers, and students with special needs (METTA School).
- Activities include adventure camps, drill camps, leadership training courses, live firing exercises, jungle navigation, and urban operations exposure training.