Quan Teng Foong

quantf@u.nus.edu | +65 9797 4635 | GitHub | LinkedIn

EDUCATION

National University of Singapore   *Aug 2020 – May 2024*

Bachelor of Computing in Computer Science, Honours

- Penultimate year student
- Focus area in Artificial Intelligence and Software Engineering
- Relevant courses: *Data Structures, Design and Analysis of Algorithms, Software Engineering on Modern Application Platforms, Database Platforms, Machine Learning, Natural Language Processing*
- Member of NUS Canoe Sprint

WORK EXPERIENCE

Robot Navigation Intern   *May 2022 – Oct 2022*

Continental Automotive

- Designed and executed experiments to investigate the effectiveness of Visual Simultaneous Localisation and Mapping(vSLAM) algorithms on Continental's last-mile delivery robot, Corriere
- Recorded and analyzed data to evaluate the usefulness of vSLAM algorithms that usilise 3D Computer Vision
- Debugged and improved ROS packages to accelerate data collection process

Teaching Assistant (Programming Methodology)   *Aug 2021 – Nov 2021*

National University of Singapore

- Led 12 tutorial sessions over the course of the semester for Computer Science freshmen
- Helped to cement students' understanding of programming and computational problem solving
- Graded and provided feedback on weekly programming assignments
- Provided consultation sessions outside of class
- Average teacher rating of 4.7/5.0 (dept. average: 4.2/5.0)

PROJECTS

Peggle for iPad [GitHub]   *Jan 2023 – Feb 2023*

A clone of the classic game, Peggle, by PopCap

- Employed good Software Engineering practices to increase extensibility and code reusability
- Utilised Swift's Protocol Oriented Programming paradigm
- Constructed a high cohesion, low coupling Physics Engine from scratch using the Verlet Integration Equations

Carousell Scraper [GitHub]   *Aug 2022 – Oct 2022*

A web scraper with a telegram bot frontend for the online second-hand market, Carousell

- Processed HTML webpage using BeautifulSoup4
- Deployed on Telegram using python-telegram-bot
- Executed on a Raspberry Pi 2 server running Raspbian OS, repeatedly looping using crontab

Middle Juncture [GitHub]   *Jul 2022 – Aug 2022*

Apple's Center Stage, for Linux

- Processed images with OpenCV
- Implemented facial recognition using dlib with GPU support

Hard Disk Predictive Maintenance [Github] [Report]   *Feb 2022 – May 2022*

Several Machine Learning models with the goal of predicting hard disk failure

- Investigated the efficacy of modern-day Machine Learning models
- Experimented with over/under-sampling methods to further improve prediction
- Improved feature selection using LIME

TECHNICAL SKILLS

Programming Languages: C, C++, Python, Java, HTML/CSS, Swift, MIPS
Frameworks: PostgreSQL, Django, NumPy, Pandas, StoryBoard, UIKit
Developer Tools: Git, sklearn, Docker, Robot Operating System, OpenCV, PyTorch
Others: Computer-Aided Design, 3D printing, Arduino