

Skills

- **Fields of Interest:**
 - o Data Analytics & Data Science
 - o Software Development
 - o Machine Learning
 - o Control Systems
- **Programming Languages & Technologies:**
 - o Python: NumPy, pandas, Flask, TensorFlow
 - o JavaScript: Node.js
 - o C/C++, C#
 - o SQL (Postgres) & NoSQL MongoDB
 - o AWS: S3, EC2, RDS, RedShift,

Employment

- **Software Engineering Intern** // Dory Technology (December 2019 – February 2020)
 - o Worked in backend development and data engineering for an online item exchange platform.
 - o Developed scripts to clean and normalize user app usage data. Further implemented statistical methods to gain understanding of trends in user behavior.
 - o Designed ETL pipeline for transferring NoSQL OLTP database contents to relational Amazon RedShift OLAP data warehouse for complex querying and insight generation.
 - o Implemented automated data reporting systems and set up data visualization tools for business intelligence.
- **Software Developer** // PolyU SAUVC 2020 Team (September 2019 - Present)
 - o Participated in an international autonomous underwater robotics competition to be held in Singapore.
 - o Developed computer vision system as part of the software team. Primarily assigned to object detection through geometric analysis of camera input data as well as the use of lightweight machine learning models with the Raspberry Pi. Also worked in developing control systems using the Pixhawk Platform.
- **Programming & Hardware Instructor** // BSD Education (April 2018 – Present)
 - o Prototyped programming & hardware projects to be used in primary and secondary school curriculum.
 - o Developed and taught programming and electronics curriculum with the use of Arduino and Raspberry Pi platforms in conjunction with web technologies.
- **Strategist** // SpotlightHK (April 2018 – December 2018)
 - o Conducted market research and ran social media analytics to guide business strategy development for a local Hong Kong fashion event.

Education

- **BEng in Mechanical Engineering** // The Hong Kong Polytechnic University (2017 – 2021)
 - o **Specialization:** Autonomous Systems
 - o **Clubs & Activities:** PolyU "Attache" Student Ambassador Scheme, Indonesian Student Association Committee, Engineering Club Member

Projects

- **Hong Kong Techathon 2020 (Champion Team)** // Big Data & FinTech Hackathon (January 2020)
 - o Champion team member for the big data & fintech category of the Hong Kong Techathon 2020
 - o Developed a prototype and proof of concept platform that uses machine learning and natural language processing to correlate market movements/trends with news data and generate product risk metrics for trading financial instruments.
- **DONUT WASTE Student Technology Advisor** // IOT Environmental Startup (July 2018 – August 2019)
 - o Programming and electronics advisor for a hardware startup aiming to reduce food wastage.
 - o Designed an IOT weight scale to be stationed in school cafeteria food bins to monitor food wastage.
- **First Robotics Competition 2019 Student Mentor** // International Competition (September 2019 - Present)
 - o Provided supervision in hardware and software development for a high school robotics team (Carmel Elsa High School, Hong Kong).
 - o Directed team in the creating robotics control systems in preparation for the FRC 2019 competition.