

PO LIU

2ND YR BSCI MECHATRONIC SYSTEMS

I'm interested in Brain Computer Interfaces and machine learning. In combination with robotics, I aspire to integrate machine learning and neuroscience to improve the quality of life for people who suffer from cognitive and neuromuscular disorders.

Outside of my role in the Student Science Squad, I mentor hoping to show students that studying STEM is an opportunity to aspire to, not an obstacle to avoid.



SPECIALIZATIONS

Python3 - Sklearn, Numpy, Matplotlib, Seaborn, Pandas

Machine Learning - Applications in EEG analysis, PCA analysis

Electronics - Arduino, Through hole & Surface mount soldering

KiCAD - Footprint design, PCB circuit design

Fusion360 - Modelling & Assembly

Website Development - Front end design

MATLAB & C programming

EXPERIENCE

Bionics Institute Intern

BIONICS INSTITUTE | AUG 2019 - DEC 2019

- Construct, design & assemble PCB circuits
- Rapid Prototyping
- Refill & Through hole soldering
- KiCAD/ Fusion360 CAD design

Logistics Officer

STUDENT SCIENCE SQUAD | JUL 2019 - CURRENT

- Help run a free tutoring program for students from year 7-12!
- Provide opportunities for students to attend and be involved with STEM events
- Help run fundraisers for charity

Mechatronics Junior

MELBOURNE UNIVERSITY RACING | MAR 2009 - CURRENT

- Designed suspension data acquisition systems for the electric vehicles
- Fusion360 CAD design

Mathematics Tutor

CLUEY LEARNING | JUL 2019 - CURRENT

- Teach mathematics to students years 6-12

In2Science Mentor

IN2SCIENCE | MAR 2020 - CURRENT

- Mentor for high school students to show the life of a uni student in STEM
- Communicating Science (hopefully inspiring too!)

PROJECTS

Classifying Motor Imagery in EEG Data

GUIDANCE FROM PROFESSOR DR SAM JOHN




- Detect related desynchronisation and synchronisation to distinguish left & right hand motor imagery and rest
- Feature extraction with signal processing
- Classification with Machine Learning

Rotary Potentiometer Suspension System

MELBOURNE UNIVERSITY RACING - SENSORS TEAM

- Design a way to measure suspension movement in a cost effective way
- Has at least 1mm of accuracy
- CAD design for custom mounting on chassis in rear and front suspension

CONTACT

-  123-456-7890
72 Lambeth St, Kensington, VIC
-  Portfolio Website
popo-liu.netlify.app
-  LinkedIn
<https://www.linkedin.com/in/pop-liu-science-slave/>

EDUCATION

University of Melbourne

BACHELOR OF SCIENCE - 2021

Engineering Music Society

- General committee 2020

Melbourne University Biomedical Engineering Society

- Social Officer 2020

Melbourne University Electrical Engineering Society

- SuperHack 2019 Mentor

Melbourne University iGEM team 2020

- Head of Web Development
- Dry Lab & Wet Lab

PERSONAL ATTRIBUTES

Motivated & Persistent

I am not a genius. Everything I have achieved to this date is a result of my own hard work and dedication to my dreams and passion

Fantastic communication skills

I have many experiences from attending impromptu Hackathons, group projects as well as tutoring, mentoring and musical performances. They have been able to close the gaps between many age groups and demographics

Creative with common sense

Jazz improvisation is about using creativity so that people want to listen, I am creative but not for the sake of originality. This comes through my problem solving and lateral thinking abilities

Punctual & Professional

Not only can I communicate and work in a professional manner, I always arrive & finish my work on time.

Strong written skills

This has opened many opportunities personally, be it for consulting, promoting or contacting someone

VOLUNTEERING

2020

Melbourne University Peer Mentor

In2Science Mentor - Present

2019

SuperHack 2019 Mentor

Diamond Valley Youth Vinnies

PROFESSIONAL REFERENCE

Dr Alex Thompson - Research Fellow at the Bionics Institute

384-388 Albert St, East Melbourne VIC 3002

Contact: (03) 9667 7539 athompson@bionicsinstitute.org

ACHIEVEMENTS

99.65 ATAR

2018

2nd in Physics

NCEA 3 Endorsed With Excellence

Calculus & Statistics Endorsed With Excellence

Scholarship Calculus, Physics, Statistics Course

Selectee