

Education

- 2020-Present **Centre for Doctoral Training in Prosthetics and Orthotics (PhD), Imperial College London**
Supervisor: Dario Farina
- 2016-2020 **MEng Biomedical Engineering, Imperial College London**
First Class Honours (78.14)

Research Projects

- 2020-Present **PhD project:** Intent Driven Gait Synthesis for Simulated Assistive Technology. Creating simulated locomotion testbed for virtual P&O controlled by high-level intent. Transfer of results to real hardware evaluated on a powered soft ankle exoskeleton. Intent estimation based on sEMG signals.
- 2019-2020 **Master's project:** Temporal Convolutional Network Based Trunk Muscle Signal Decoding for Exoskeleton Applications. Angle estimation using bipolar sEMG.
- 2018-2019 **Year 3 group project:** Morphological classification and cell counting of dLGN interneurons. Parallelised image processing, addressing high density regions and multilayered cells, classification using CNN. **Project accepted at BioMedEng19 Conference.**
- Jul-Sep 2018 **Undergraduate Research Opportunities Programme:** Accessible modular user interface design for controlling various assistive technology, such as a robotic arm, IOT lamp and smart cooking pan. **Project accepted at Association for the Advancement of Assistive Technology in Europe Conference.**

Skills

- **Technical skills:** Signal processing, Brain Machine Interfacing, Machine Learning, sEMG, Lower limb and gait kinematics
- **IT:** Python, C#, Matlab, C++, Arduino, Keras, Git, LaTeX
- **Med-device Entrepreneurship:** Modules about patents, IP, regulations (MDR), and tech transfer
- **Teaching:** Training in lesson planning, feedback, experience as teaching assistant

Interests and Successes

- Organising committee member of CDT P&O Conference 2021
- Year 3 Dean's list, best poster award for year 3 project
- Courses in Creative writing, Sound technology, Philosophy
- **Personal Projects:** Heart rate monitor, portable oscilloscope, programming video games, web design, image processing app
- Dragon boat championships: 4 European gold, 3 world bronze
- Played guitar for 10 years