# **GEORGIOS GRYPARIS**

### Education

### PhD Biomedical Engineering, Imperial College London

- Novel techniques for Adaptive Neuromodulation: Funded PhD position in the department of Bioengineering (supervisor: Prof. Drakakis) with a focus on Deep Brain Stimulation (a surgical procedure where the brain is stimulated through implanted electrodes to treat Parkinson's disease and other neurological disorders)
- Projected Research Outcomes
  - A high-precision, versatile, handheld instrument to record/process neural signals (Prototype: May 2021)
  - An algorithm to extract features from acquired neural data and adapt stimulation parameters in real time
  - Preliminary testing on primates; after regulatory approval, participation in small scale clinical trial

### MEng Biomedical Engineering (1<sup>st</sup> Class), Imperial College London

- Awards: 2<sup>nd</sup> in class of 92 (Overall Grade: 81%) Top 10% of Cohort (Dean's List) in Years 1, 2 and 4
- Computational Project: Algorithm to predict hand trajectory from primates' real-time neural recordings •
- Electrical Engineering Project: MEng thesis on a novel method for artefact suppression during Deep Brain • Stimulation (designed and tested a device for recording brain activity while the brain is actively stimulated)
- Design Project: Smart baby buggy for visually impaired parents developed through collaboration with a local . visual awareness training service (personally implemented ultrasound-based obstacle detection system)
- Business Modules: Finance & Financial Management; Project Management

### BSc Mathematics (3rd Class), Imperial College London International Baccalaureate (40/45), Moraitis School Athens

## **Work Experience & Research Placements**

### Graduate Teaching Assistant – Imperial College London Oct 2020 – Present Lead study groups for the second year "Signals and Control" module (Class size: 30) • Ran second year MATLAB & Simulink sessions (Class size: 30; supported by an undergraduate assistant) • Marked final exam papers for the "Signals and Control" module Undergraduate Teaching Assistant – Imperial College London Feb 2018 – Jun 2020 Developed control engineering teaching materials and assisted in electrical engineering lab sessions International Undergraduate Researcher – MIT (Bryson Lab) Jul 2019 – Aug 2019 Funded placement (IROP Bursary) on data analysis for single cell RNA sequencing experiments Benchmarked machine learning pipelines for cell classification from transcriptomic data Undergraduate Researcher – Imperial College (BIOCAS group) Jul 2018 – Aug 2018 Funded placement (UROP Bursary) on low-power design for measurement of bioelectric signals Undergraduate Research Assistant – Imperial College (Dickinson Lab) Jul 2017 – Aug 2017

Assisted in developing an impedance-based solution to positioning a vascular catheter

### **Private Tutor – Freelance**

- Full time mathematics and physics private tutor in Athens, Greece
- Prepared students for the IB and Panhellenic university entry exams individually or in groups of up to five

### **Additional Information**

- Programming Languages: MATLAB, Python, C, C++, R •
- Design Software: Altium Designer, Simulink, OrCAD PSpice, TINA, LTspice .
- Microsoft Office (Word, Excel, Power Point), LaTeX •
- Language skills: Fluent English (C2), Intermediate French (B2), Intermediate German (B1), Native Greek •
- Completed compulsory military service (November 2014 July 2015) •

### Oct 2020 - Present

Sep 2016 – Jun 2020

Sep 2009 – Jun 2013

Sep 2007 – Jun 2009

Aug 2013 - Oct 2014 & Aug 2015 - Aug 2016