

## EDUCATION

- Master of Science (MSc) Human and Biological Robotics, with Merit** Oct 2018 - Sept 2019  
*Imperial College London*  
SPECIALIZATION: Machine Learning, Computer Vision, Robotics, Human Control and Learning, Brain Machine Interfaces, Computational Neuroscience  
THESIS: Robot learning (Sim2Real) for a mobile base with a robot arm leveraging deep learning and reinforcement learning technologies, BICI and Dyson Robotics Research Labs
- Bachelor of Engineering (BEng) Mechanical Engineering, First class honour** Oct 2015 - Jul 2018  
*University of Birmingham*  
SPECIALIZATION: Electrical Engineering, Materials Engineering, Thermodynamics & Fluids, Mechanics, Mechatronics & Control Engineering, Mechanical Design, CFD/FEA

## EXPERIENCE

- Automation Project Engineer** Sept 2020 - Oct 2024  
*VHP SP (Oberthur Fiduciaire)* *Ugchelen, Netherlands*
- MANAGING STRATEGIC CAPEX PROJECTS ON INDUSTRIAL AUTOMATION, DATA ANALYSIS AND IoT: gathering requirements, engineering solutions, defining scope, executing projects with suppliers and internal resources, commissioning and final delivery.
  - MONITORING BUDGET, SCOPE, AND PLANNING: updating control documents, following planning and scope, reporting to management and leading update meetings.
  - CONTRIBUTED TO PROCESS IMPROVEMENT ON MANUFACTURING LINES: programming in our DCS environment for process control optimisation, integration of Keyence cameras for visual inspection, expanding track&trace system and more.
  - SUPERVISING JUNIOR ENGINEERS: guided projects on energy management solutions, DCS integration and mechanical design (CAD).
  - INITIATED THE IMPLEMENTATION OF ISO 50001 (ENERGY MANAGEMENT) : followed the DMAIC process to set up measurements, indicators, a control strategy and an action plan.
  - DEVELOPED DATA VISUALISATION TOOLS: created dashboards in Python with links to data sources such as SQL databases, industrial historian and industrial communication protocols (MQTT, Modbus, OPC UA).
- Software developer** Sept 2019 - Nov 2019  
*Wippit (3D Printing Startup)* *London, UK*
- Software development in Python for the backend of the application.
  - Resolved issues on the application user interface using wxpython for the user interface.
  - Followed continuous integration and deployment, and version control practices with a team of developers.
- Research Assistant Robotics** Oct 2017 - Jul 2018  
*University of Birmingham, Medical Robotic Group* *Birmingham, UK*
- Derived an analytical model and created a physical model in Simulink Matlab to analyse vibration of the tip of a robot.
  - Implemented a computer vision algorithm to obtain the segmentation of a biological cell and programmed a controller in Matlab & Arduino for a robot with 6 actuators.

## SKILLS

<b>Tools</b>	MS Project, DevOps, Visual Studio, Version control, Matlab, CoppeliaSim, Linux, CAD
<b>Programming</b>	Python, DCS & PLC, SQL, Web dev (Flask, Dash, SQLAlchemy), Deep Learning (Pytorch)
<b>Language</b>	<b>French</b> (native), <b>English</b> (professional), <b>Italian</b> (intermediate), <b>Dutch</b> (elementary)

## SCHOLARSHIPS AND CONTRIBUTIONS

- Imperial College London** Oct 2018  
*Department of Bioengineering Bagrit scholarship for the Master of Science in Human and Biological Robotics*
- MARSS Conference** Jul 2018  
*F. Sadak, M. Saadat, A.M. Hajiyavand and G. Nomicos, 2018, Vibrational Analysis During Cell Injection in ICSI Operation*