

EDUCATION

- Master of Science (MSc) Human and Biological Robotics, with Merit** Oct 2018 - Sept 2019
Imperial College London
MODULES: Machine Learning, Robotics, Statistics/Data Analysis, Human physiology, Medical Device Entrepreneurship, 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
MODULES: 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 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 to key-users and maintenance.
 - MONITORING BUDGET, SCOPE, AND PLANNING: updating control documents, checking planning and scope recurrently, writing reports to management, leading update meetings to ensure clear communication with project teams and stakeholders.
 - SUPERVISING INTERNS: guided projects on energy management solutions, DCS integration, and mechanical design (CAD).
 - DEVELOPED DATA VISUALISATION TOOLS: created a dashboard with dash plotly library in Python to visualise energy data and built an API to communicate time series data between the dashboard and an industrial historian.
 - CONTRIBUTED TO PROCESS IMPROVEMENTS: programming in our DCS environment (defining requirements with process engineer, testing in the field), integration of Keyence cameras for visual inspection and track&trace on production lines.
 - INITIATED THE IMPLEMENTATION OF ISO 50001 (ENERGY MANAGEMENT) : followed the DMAIC process to set up measurements, indicators, a control strategy and an action plan.
- Software developer** Sept 2019 - Nov 2019
Wipit (3D Printing Startup) *London, UK*
 - Implemented an algorithm in Python to prevent loading of multiple application instances by monitoring processes.
 - Solved bug fixes on the application user interface programmed in wxpython.
 - CI/CD and version control practices with a team of developers and creation of executable for the software application.
- 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 a segmentation of a biological cell and programmed a controller in Matlab / Arduino for a robot with 6 actuators.

SKILLS

Tools	Matlab, Visual Studio, CoppeliaSim, Version control, Linux, DevOps, CAD, MS Project
Programming	Python, DCS/PLC, SQL, Python libraries (numpy, pandas, opencv, pytorch, dash)
Language	French (native), English (proficient), Italian (intermediate), Dutch (elementary)

SCHOLARSHIPS AND CONTRIBUTIONS

- Imperial College London** 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