# **Paul Brown**

Graduate engineer with a multicultural background looking for opportunities within industry. Award winning biomedical device research experience with prototype production. Experience effectively cooperating and leading within teams in demanding, time constrained industry projects. Knowledge seeker, always starting online courses or picking up a book to learn new skills, languages and hobbies. Coding experience with multiple languages in numerous of projects, mainly MATLAB and Python.



# **Education**

Sep 2019 to Present - University of Bristol, UK

❖ MSc Engineering Mathematics – Ongoing

Sep 2014 to June 2018 - London South Bank University, UK

❖ BEng (Hons) in Mechanical Engineering - First Class with Hons

Sep 2016 to Mar 2017 - University, Hochschule Luzern, Switzerland

Student exchange program – "A year abroad"

Sep 2013 to June 2014 - Heart of Worcester College, UK

\* BTEC Level 2 in Mech. Eng. - Distinction.

Sep 2011 to July 2013 - Hereford Sixth Form College, UK

❖ A-level Maths, Physics, Spanish; AS Archaeology.



# **Projects**

# MSc Project - Offshore Wind Farms: Optimised Design of Monopile Foundations

- Group project studying the non-linear behaviour of Monopiles in non-elastic soils to predict failure in order to optimise monopole designs, designed to be used in industry.
- Constructed most of the MATLAB code that used the Centre Finite Divided Difference Method to predict soil responses and reaction forces, when under cyclic loads.

# MSc Dissertation Project – Adapting Morphology to cope with changes in soft robotics

- Changing the environment, starting morphology and boundary conditions to study how soft robots evolve to accomplish a given task.
- Using Voxelite on Linux to run simulations through BlueCrystal, Bristol Robotics Lab.

# BEng Dissertation Project – Design, Make and Test a Simple Prosthetic Device for Developing Countries

- ❖ Awarded 'Institutions Best Project' by the IMECHE.
- Pneumatic peg leg design developed to deal with harsher environments while keeping the device as simple as possible to reduce costs. Prototype design, manufacturing and testing.

## Lucerne University Project - Portable Solar Panel Charger

- Group project to design and build a portable solar panel device to charge portable devices.
- Charged with implementation and design of the Arduino 'brain' for the project.

## BEng EWB Project - Nepal Water for Health

- Universities runner up project for the 2014 Engineers Without Borders (EWB) challenge.
- Providing clean drinking water, hygine and sanitashion for a community in the town of Sandikhola, Nepal.

### Formula Student - London South Bank University

- Member of the LSBU formula student team for the last two years of undergraduate degree.
- Design of chassis on the AutoDesk suit, with hands on experience manufacturing. Involved in redesign of loom, fuel tank design and manufacture, admin and fundraising.



# **Work Experience**

# Jun 2020 to present - Math Curriculum Writer, Red Spark Learning

- Writing math curriculum for their new online platform.
- Provide detailed explanations for mature students some with learning difficulties.

# Jan 2019 to July 2019 - Admin/Quality Auditing, Hive Cleaning Ltd.

- Admin work including, weekly payroll, invoicing, orders, staff and site setup, translation and training new staff.
- Tasked with carrying out quality, safety and logistical audits for all Hive contracts while PAT testing and recording all hive appliances.



# **Personal Details**

#### Phone

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#### Fmail

brownpr10@gmail.com

#### LinkedIn

htps://www.linkedin.com/in/brownpr/



# Languages

English (Fluent)
Spanish (Fluent)
German (Intermediate)
Italian (Intermediate)



# Software

## Cad software:

Autodesk Inventor (Experienced)
Autodesk Fusion360 (Experienced)
Autodesk AutoCAD (Experienced)
ANSYS Workbench (Intermediate)
SolidWorks (Intermediate)

# Simulation and Modelling:

ANSYS CFX (Intermediate)
MATLAB Simulink (Intermediate)
Voxelize (Beginner)

## **Meshing Software:**

ANSYS ICEM CFD (Intermediate)

## **Computer Languages**

Python (Intermediate)
MATLAB (Experienced)
C/C++ (Intermediate)
Latex (Experienced)
MySQL (Beginner)

## Others

Windows OS (Experienced)
Linux (Intermediate)
MS Office Suit (Experienced)



# Skills

Full UK Drivers Licence Highly motivated Analytical Skills Organisation Skills Eye for detail Critical Thinking Communication Skills Team Management Lateral Thinker