# WEBSITE VERSION

# **Contact For More Details**

# Skills



Project Management: Currently manage multiple high level projects at UHI Inverness and have been responsible for successful funding applications and facilitating high value promotion for UHI in the Inverness region. Previously conducted training in Project Management, External Development and Team Management. Previously worked as a Reserach Associate with UHI on an academic project with over 5 partnering organisations. Proficient in external networking and facilitating cross organisational collaborations.



**STEM:** Continuously worked as a Stem Ambassador across multiple different organisations; teaching basic electronics and robotics to primary age children and mentoring secondary school children in preparation for higher education. Acted as business to academia representative for a private limited company & supported then eventually project managed various STEM projects for an University. Currently hold a full PVG Certificate.



**Robotics:** Designed and Constucted Robotic Buggy for Final Year Project, Undertook Internship in Industrial Robotics in Germany, Constucted 2D Lidar and tracking systems; programmed though C. Studied Robotics in Undergrad at UHI. Taught Basic Robotics Principles to School-children.

**Electronics:** Trained to use Autodesk Eagle PCB Software, Developed Custom PCBs with Signature, developed for Low Energy Systems (Battery and Low Voltages), familiar with Atmel and Pic Micro Systems. Programming in C, C++.



# **3D Modelling:** Trained in Solidworks 3D Modelling and Assembly Software at Glasgow City

College, worked as principle 3D Modeller for a Manufacturer (Entrotec Product Engineer). Trained in Autodesk Fusion 360 with UHI, produced custom 3D prototypes for additive manufacture (3D Printing). Adept with 3D printing (over 300 hrs of printing) in both Engineering and Product Design tasks. 3D work has been lauded and been subject to media attention in the Scottish Highlands.



I/O Design: Previously concerned in the development and utilisation of various input and output systems ranging from microwave radar, PIR, Thermopile, LIDAR, communication systems (BLE, 2.4ghz), audio and LED Array Systems. Developed various systems over the years as part of R&D projects in Industry and Academia.



IT Skills: Started career in IT Support and continued development in this capacity through various roles by engaging with customers and stakeholders in occasional debugging, developing test rigs and calls. Software skills; Proficient in Microsoft Excel (including utilising formula, automation and conditional systems), Microsoft Word, Powerpoint, Visio and a variety of systems such as Autodesk, IDEs & VR/AR tech.

## Education and Certification History

CPD in **3D Modelling and PCB Design with Autodesk Software** (2020 – 2021). Appraised by UHI Moray College.

Completed UHI's Enterprising Researcher Course for Business Management (July 2020).

Completed **Knowledge Transfer Network "Innovation Canvas" Course** for Project Management, Team Management and Stakeholder Engagement. (July to September 2020).

Completed **"Introduction to Solidworks 3D Modelling"** module at Glasgow City College (October to December 2018)

Possess a 'Working with vulnerable persons and groups' (PVG) certificate provided by Glasgow Caledonian University and authenticated by Glasgow City Council (2016-2019), Updated at University of the Highlands and Islands (2019 – Current).

Glasgow Caledonian University. July 2013-2017: Computer and Electronic Systems Engineering (Robotics and Mechatronics), BEng(Hons) 2:1.

Initially achieved a Certificate of Higher Education (CertHE) and a Diploma of Higher Education (DipHE) with distinction in Electronic Technologies. Degree achieved; an Upper Second Bachelor of Engineering (Honours) in Computer and Electronic Systems Engineering with specialisation in the field of Robotics and Mechatronics at Glasgow Caledonian University.

Modules undertaken include

- Integrated Project 1, 2 and Industrial Design Project 3
- Mathematics 1 & 2
- Engineering Design and Analysis 2 & 3
- Intelligent Robotics and Mechatronics
- Control and Instrumentation Systems 1 & 3
- Electrical Principles and Circuit Theory
- Digital and Programmable Systems 1 & 2
- Signals and Electronic Design Theory

## Hyndland Secondary School, Glasgow.

# SQA Highers 2011-2013

6 Higher passes and a level 6 National Progression Award; including English (A), Philosophy (B) and Chemistry (B).

## **Current Work Experience**

# March 2022 – April 2023, Engineering Associate (Research), University of the Highlands and Islands, Inverness. (Fixed Term)

Currently working as an Engineering Research Associate with the University of the Highlands and Islands Inverness Campus. My current responsibilities involve managing 3 projects within UHI Inverness (EngTech):

*Circular Economy in Engineering Technology*, A project which aims to migrate Engineering Technology within UHI towards a circular economy framework and produce valuable data on the carbon footprint of the curriculum and campus. This has also formed the basis of external development with local renewable research organisations such as Powerhouse (Cromarty) & Highland Council's Climate Change Department. *Hydro Ness Scaled*, a collaboration project between UHI and Highland Council to create a scaled representation of the Hydro Ness power plant to be 3D printed and produced for awards and schools, my work has subsequently received positive press attention nationally. *STEM Equity*, using my prior stem background, I am managing a project which aims to encourage women and MtF trans women, to move into STEM related training and apprenticeships after secondary school. This have involved acquiring funding and fostering collaborations between industry & public sector organisations towards Stem Engagement. I have also created and manage a team of STEM ambassadors who I've trained to provide workshop provision.

This position has also allowed for my attendance at international conferences such as London Tech Week and extensive work travelling to locations across the UK for events, presentations and high level networking.

# **Profile at a Glance**

A successful project lead and facilitator of external collaborations with various industry and public bodies such as; SDS, Highland Council, HIE, Diageo, Lifescan, HighLife, Smart Stems, West Lothian College, UHI Inverness & Moray, and GCU. Also a trained design and product engineer with years of experience in R&D including experience across all aspects of the product lifecycle. An accomplished designer in 3D Design, Additive Manufacture and 3D printing. Likewise, has undertaken roles as a STEM teacher and liaison, both inside and outside of academia. Been involved in both PR and Press activities for an organisation.

I look towards a new challenge and I believe that my experience working with STEM, Carbon Awareness, Circular Economy, Design, External Relations and Engineering, sets me apart from the rest!

## Interests



Astronomy



Designing (3D Modelling & Printing)



# Other Information

Him/He/His (Male)

Based in Inverness with Temporary Base in Glasgow when required (family home). Not Accepting Roles which require permanent relocation to other nations of the UK.

Would consider relocation within the Lower Highlands, Perth and Stirling Areas with understanding of requirement for relocation.

Happy to travel nationally and internationally for work requirements

Fully Vaccinated Against Covid-19 with 2 Full Jabs (Pfizer) and 1 Booster (Pfizer).

Possess a Full UK Drivers Licence and currently drive with Class 2 Business Insurance.

#### **Previous Work Experience**

# December 2019 – March 2022, KTP Research Associate, University of the Highlands and Islands, Inverness. (Fixed Term)

Worked as a Knowledge Transfer Associate in Research with the University of the Highlands and Islands' Inverness and Moray Colleges. My role involves the design and development of a low power electronic deterrence system for conservation factors. This involves, electronic design, programming, 3D modelling, manufacture, procurement, project management and testing all as part of a 1 person team over the Covid-19 Pandemic. my position also allowed me to work within two emerging colleges in the Highlands with extensive travel being routinely undertaken to on-site locations in Royal Deeside (Braemar & Ballater) and throughout the Highlands (Sutherland, Caithness, Torridon, etc.).

### October 2017 – November 2019, Design Engineer & Product Engineer, Entrotec Ltd, Livingston.

Previously worked as a Design Engineer and Product Engineer for a leading UK security system designer and manufacturer. Role included 3d modelling for manufacture, development of test rigs and documentation, acting as a liaison between the technical team, operations and manufacture and working in a technical team on prototyping, designing and programming electronic products for commercial markets. Also worked as a liaison between the company and West Lothian College and West Lothian Stem Education projects.

### September 2016 – September 2017, GCU Student Mentor for Robotics Engineering & STEM Ambassador for GCU Stem Education Projects. (Fixed Term)

Assisted with underprivileged schools in Glasgow with student mentoring, higher education support and supplying course information. As stem ambassador, undertook the running of various robotics workshops (with Smart Stems and class visits) where I provided light teaching and mentoring to classes of students from the age of 7 to 18.

# June-September 2016, Hochschule Merseburg (University of Merseburg), Germany, Robotics Intern.

Undertook an IAESTE internship and training with the University of Merseburg in their robotic technologies department. Was required to travel and stay for an extended time overseas and work within a foreign academic environment. Subsequently learned how to operate industrial robotic arm gripper systems.

## August-January 2015-2016, Morrisons Ltd, Partick, Sales Assistant.

Worked for Morrisons Ltd as a Sales Assistant where I was required to assist fellow employees with store logistics, customer enquiries and basic maintenance.

## February-April 2014, Glasgow Caledonian University, Tele-fundraiser.

Undertook training in telesales as part of a fundraising drive for GCU's charitable community stem drives. Required working in a highly competitive team with the singular goal of accruing the largest number of funds towards a charitable cause.

#### May-August 2013, DHL International Express, Customer Integration Management Support.

Was part of a team which was tasked with enabling customer communication and support with logistical integration procedures, error fixing and support. We also had to gather logistical information from customers for database updating. While working for DHL, my work lead to promotion to working for the CIS director directly.

## **Personal Statement**

For the last year, I have worked with the University of the Highlands and Islands on several interesting engineering & STEM projects in the Inverness Region. As my current term comes to an end in 2023, I find myself reflecting on my past experience and looking towards what the future holds. My experience in leading various high profile projects for UHI Inverness and having acted as a major proponent of external collaborations, from STEM to the Circular Economy, enthuses me to maintain the momentum of 2022 and to begin to managing projects and external developments in areas that I am passionate about. I want to take my strong network of Highland businesses and organisations into developing STEM Equity and sustainability to the national and international level. Having worked in both the private and public sectors, in industry and academia, I find that I'm ready to take this unique experience to the next step in developing a new and brighter future, while also bringing my engineering and design experience with me for the next big challenge in STEM, Organisational Development and Project Collaborations with High-Tech and Circular Economic industries. I hope to join you in going forward towards working with you and your stakeholders in reaching these new fantastic horizons.

#### Interests Detailed

In my personal time; I enjoy travelling, having inter-railed through Europe twice (pre-2020), as one of my joys in life is to meet people from other cultures and see life from outside my norm. As such, It has helped me strike up friendships with people from around the world, such as countries like Poland, France, Kenya, Mexico and many others.

This also helped when I worked abroad as an IAESTE robotics intern in Germany and during my time collaborating with International Grad Students at UHI Inverness. I am also a practising musician (guitarist) and have had the pleasure to play live on a couple of occasions. Finally, I am also an avid photographer and deeply enjoy taking images of the night sky due to my love of astronomy. My photography has also allowed me to do various shoots professionally too!