

Rohit Avadhani

E-mail: rohit.avadhani@gmail.com * *Telephone number:* +44-7732974847

Work experience

WD Meats

Digital Manufacturing and Automation Lead

*November 2022 - On Going
Belfast, Northern Ireland*

- Designed , programmed and deployed a tamping system using Mitsubishi PLC and affiliated sensors for the roast line decreasing labour by 3 operators and saving about 60000£ a year.
- Embedded real-time process control using C++ on Ubuntu 20.04 with a focus on HMI integration, achieving lean manufacturing metrics such as cycle time and scrap as % VOP.
- Parametric designs for gut trays on the kill floor and digital twin design on Unity AR leading to a decrease of 1 week in total planning hours.
- Integrated and managed small scale SCADA for condition monitoring for kill floor motors with focus on predictive maintenance.
- Bespoke Inventory management architecture design and built using .Net Framework and SQL, modelled to forecast buyer needs and production that helps improve slaughter line based on orders and sales from last month.
- Data acquisition through SQL and developed a .net application on C# for capturing and visualizing insights on data as well as monitoring progress on the production line for Senior management and the Floor supervisors.
- Develop and document New Process/Product Introduction (NPI) processes that bring together the key elements of process/value stream mapping, digital simulation modelling, costing/business case generation and the support required for shop floor implementation

University of Glasgow

Robotics and AI MS

*September 2021 - September 2022
Glasgow, UK*

- Team lead - Robotics Soccer Simulation using MATLAB, C++ and Simulink. 6 v 6 football game with one team on Fuzzy logic and the other team on Brute force algorithms.
- Parameter Identification of a Compliant 3D printed Damper using Piezo electric sensors, data acquisition using NIDAQ and ABABUS 9000, analysis on MATLAB.

Amazon Robotics

Solutions Design Engineer

*December 2019 - January 2021
Massachusetts, USA*

- Part of the EU-APAC team leading contractors and engineers into deploying Amazon fulfillment centers in EU.
- Scripting using python to improve designing and budgeting on AutoCAD, Mapeditor and excel which lead to a higher deployment speeds.

Technical skills

Programming Languages/Tools

C++, Python, L^AT_EX, MATLAB, Ladder Logic Programming, Emulator based RSLogix500, Ubuntu (Linux Distribution Pkg

CAD Technologies Technologies

SolidWorks, Visual Components, Gazebo, Ansys
SQL, NOSQL, ROS, ROS2, Tensorflow, Pytorch,
AWS, PowerBI

RoboKafka on GitHub

Education

MS Robotics and AI

University of Glasgow

Emphasis on Fault Detection Isolation and Recovery

September 2021 - September 2022

Thesis title: Parameter Identification of a Compliant 3D printed Dynamic Damper for Soft Robotics

MS Aerospace Engineering

University of Texas at Arlington

Emphasis on Composite modelling and design

January 2016 - December 2017

Thesis Title: Comparative Study Between Wooden and Hybrid Composites on Crossarms

BTech Aerospace Engineering

SRM University

Emphasis on CFD

August 2011 - June 2015

Senior project: Design and Development of water propelled resistojet