

Address: 19 Alma Road, Hinckley LE10 1PN

Mobile: XXXXX **Email:** pralishbusiness@gmail.com**LinkedIn:** www.linkedin.com/in/pralish**Profile**

I am a highly dedicated and practical Electrical Engineer at Evans Energy, with a background in Software and Electronics. I am a recent master's graduate from the University of Leeds, holding an Integrated Master's in Mechatronics and Robotics Engineering. My experience includes multiple R&D roles, where I have led projects in IoT and Electrical engineering, developing solutions for monitoring electrical assets for several large clients.

Education

Integrated Meng, BEng Mechatronics and Robotics with Hons, School of Electrical and Electronics Engineering, University of Leeds (2019 - 2024) 1st Class

A Levels, Hills Road Sixth Form College, Cambridge (2017 - 2019)

<i>Mathematics</i>	<i>A</i>	<i>Physics</i>	<i>B</i>
<i>Chemistry</i>	<i>B</i>	<i>Extended Project</i>	<i>A</i>

Work Experience

Evans Energy, Electrical Engineer, Hinckley (August 2024 – Present)

- Constructed various custom-built PLC devices for remote health monitoring of large electrical assets through IIoT, using embedded system design, Python and C++
- Designed custom IoT Devices through PCB design in EAGLE, FFF and through creating custom software in C++ for measuring high voltage asset performance with various microcontrollers
- Designed metering units for installation at Solar Park sites >15MWpk, with SOLIDWORKS and Fusion design.
- Developed fault monitoring methods through software and hardware, reducing faults for high value sites
- Led meetings with high value clients, directly offering solutions to increase company efficiencies.

University of Leeds,

Software Research Assistant, Leeds (July 2024 – October 2024)

- Designed and created a custom slicer for controlling advanced manufacturing machines using Python.
- Led research projects in software development for use in Advanced Manufacturing.

Embedded Systems Lab Assistant, Leeds (October 2023 -July 2024)

- Assisted multiple students with C++ learning and queries throughout multiple lab sessions.
- Invigilated students' software engineering exams.

Power Electronics Engineer Intern, Leeds (July 2021 – September 2021)

- Designed and tested a PCB using Eagle (and MATLAB for simulation) for DC-AC conversion, which was used in teaching power electronics to students, with logic programmed onto an STM microcontroller

Software Research Engineer Intern, Leeds (January 2021 – March 2021)

- Collaborated in the ABBA-IoT project for CyberASAP.
- Developed team-working and researching skills, working in node-red and interfacing code with ICSim using a Raspberry Pi 3.

VoltVision,

Software and IoT Electronics Engineer, Hinckley (April 2022- December 2023)

- Designed and created a robust IoT Device for non-invasive electrical health monitoring with CAD Design from Fusion 360 and PCB Design and Assembly using EAGLE.
- Designed tailored software with enhanced security for the integration of tailored microcontroller break out boards with Raspberry Pi (using Linux and Scripting methods).
- Achieved deadlines through adopting agile framework of development
- Constructed analytical methods to analyse power data for continuous monitoring of electrical assets for large value clients (companies with FTSE100).
- Led numerous scrum meetings as scrum master, working across various departments, for large projects.
- Created custom client-facing software using Python, SQL and HTML.

Consultant Engineer, Hinckley (December 2021 – April 2022)

- Researched potential solutions for issues such as Partial Discharge

- Developed lab test jigs for the automated testing of partial discharge sensor equipment.

Relevant Projects

- **Development of a Power Electronics IoT Device:** *Designed and created an IIoT Device for Industrial use in measuring Electrical assets with PCB design, and software in Linux, C and Python, using custom STM and ESP32 microcontroller platforms.*
- **Masters (University of Leeds) Project:** *Designed and created a PCB to control and drive an active upper limb prosthetic, with haptic feedback and classification for grip strengths using EAGLE, using an ANN to classify grip strengths with force sensor data (in Python).*
- **Development of an Application for PLC Data Transmission:** *Designed and wrote custom software to read Modbus Data for IoT Purposes to run on a Linux based computer (using Python).*
- **Year 3 (University of Leeds) Individual Project:** *Developed a V2V EV charger through an integrated DC-DC converter circuit including real time simulation and prototyping.*
- **ShockSoc University Skills Development Lab:** *Taught multiple students across all years how to implement AI in programming embedded systems across multiple weeks.*
- **Power Electronics Internship Project:** *Individual project designing, simulating, and creating a DC-AC power converter using Eagle, MATLAB, and Simulink.*
- **YouthVsCovid TeensInAI Global Hackathon:** *Developed an online web-application using Python (with experience in both backend and front-end).*

Relevant Skills

- Strong industry experience with 3D CAD (Solid works, Fusion 360), with experience in additive manufacturing (FFF) and custom 3D design, with a SOLIDWORKS associate certificate.
- Strong industry experience in multi-layer PCB design for power electronic and sensing/control applications with assembly using EAGLE and ALTIUM.
- Strong industry experience in C/C++ and embedded systems, designing platforms and writing custom software for boards such as ESP32, ARM, STM32, and RP2040 boards.
- Strong industry experience in electrical simulation with Simulink and PCB design with EAGLE for designing products in R&D.
- Strong industry experience in Python, with expertise ranging from back-end development and data analysis methods (NumPy, Pandas, SciPy).
- Strong Leadership skills gained from previous positions, i.e. Vice President of Shocksoc (at the University of Leeds), and through hosting large events for my local Nepalese community.
- Strong communication skills gained from leading my karate group, and through experience in Acting, allowing me to easily build rapport with peers.
- Strong organisational skills and time management through use of tools such as Trello, and Jira.

Achievements and Extra-Curricular

- LAMBDA Distinction Acting Grade 5, 6, 7 (2024)
- Avid Kayaker for flat-water/whitewater (2024) and Volleyball player (2024)
- 2nd Dan Blackbelt with more than 10 years of experience in Shotokan Karate (2019)
- Grade 6 Electric Guitar with Trinity School (2018)
- Duke of Edinburgh Awards: Silver DofE award (2017), Bronze DofE award (2016)

References

- *Available upon request*