

# **ESPA Robotics and Automation Research Project** (BOORAR1306)

### Apply here

Start date Flexible

**Duration** 6 months

#### Languages

Good spoken and written English levels are required (B2 onwards)

#### Location

Working in **Lisburn** and living in Belfast, Northern Ireland Belfast is the capital city of Northern Ireland and over recent years has seen a period of significant regeneration and growth. The birthplace of the Titanic, this vibrant city has a buzzing nightlife and social scene with many cultural events taking place throughout the year. Close to beautiful countryside and the famous Giant's Causeway, Belfast has something to suit all tastes.

### Are you eligible?

You are eligible for an ESPA internship if you are a registered student or have graduated within the past two years and have access to some form of grant funding.

### Benefits

See website for details of all ESPA benefits. For all internships over 6 months, additional benefits will be paid. Details available at interview.

# Role

This is an exciting opportunity for an Industrial/Manufacturing Engineering student to take ownership of a project in the initial research and assessment of the viability of automation, within a manufacturing facility. With specific emphasis around factory automation and machine control, you will be mentored throughout to achieve the set objectives. Your research will include a range of different operations, such as plastic extrusion, packing, packaging, kit assembly, profile cutting, notching. This project will take your skills to the next level and supplement your studies.

## **Project Outline**

- Initial research and assessment of existing site processes for automation and or robotics
- Present researched results as options for development and implementation, showing how you have approached the objective and worked through to the solution
- Investigate process automation for product packaging
- Assessment of other procedures with potential issues

# **Field of Study and Required Competencies**

- Educated to degree level or equivalent in an appropriate discipline
- Understanding software control of machines and robotic systems
- Excellent research, analytical, organisational and communication skills
- Appreciation and experience in coding languages C#, Java, Python, C. (Automation commonly use C and Python and some of our devices use C# and Java. Some robotics do not require coding, can be moved by hand and the coding translated.)
- Excellent verbal, written, math and presentation skills, with great attention to detail.

### Good to have:

Experience of bespoke manufacturing processes

### The Host Company

The host specialises in the design and production of bespoke plastic components for several industries including automotive, construction and transport. Combining the latest manufacturing techniques and responsive customer service to meet client needs, they have been at the forefront of the industry for nearly 50 years. Delivering collaborative design and manufacturing services, they have built a strong reputation for performance and are now seeking ambitious individuals to assist in their technological advancement