Digital Technology Internship Placement

Employer Information:

'Made Smarter' is a Government funded pilot programme, matching your expertise, skills, and insight to help North West businesses implement digital tools. You will be working on a live project while gaining valuable experience for your C.V.

Placements are open to 3rd and 4th Year Undergrads, MSc, and Postgraduate Students

Placement Information

Job Title:	IIOT - Research and Development Role
Business Overview	The business specialises in precision cutting and slitting of flexible materials for critical applications in aerospace and other demanding sectors including, automotive, space, healthcare, oil and gas and the 3D printing of composite tapes. They have achieved steady year on year growth since 2014 when they introduced precision narrow slitting of composites for aerospace. This technology is fundamental to the extensive use of composites in "lightweighting" commercial aircraft such as the Boeing Dreamliner, Airbus A350 and future aerospace programmes. They have just one major global competitor in this field and aim to be the preferred supplier for the next generation of commercial airframe programmes currently in development.
Location:	Bolton, Greater Manchester
Number of posts:	ONE
Job Description: *Please include as much information as possible including main purpose and detailed duties/responsibilities*	We are looking for an intern to develop a strategy to enable sensoring of our machinery. This will provide us with data on machine performance, which will also highlight any potential issues caused through vibrations and irregular readings which may lead to machine failure and unplanned downtime. Earlier this year we introduced a data capture system called Total Control Pro (TCP). We would look to use the skills of our intern to integrate the data which is being collected from TCP and combine this with information from the sensors and suggest how we could use this data to make better decisions and improve productivity. We also have the need to develop technologies to extract valuable data which is being generated on our machine such as continuous in line measurement of sizes with the ability to use this information to improve our processes and where appropriate share this data with our customers to give us a competitive advantage.

	The final stage of the project would be to identify a suitable platform to collate our data and display on a dashboard to enable better informed decision making. Project stages: Stage 1. Feasibility study looking at how to add sensors to all our machines and what type of data we could capture from each one. Identify potential suppliers, costs and produce a project plan. Stage 2. Identify how to capture and extract data from current in-line measurement and recording equipment on machinery. Identify potential suppliers, costs and produce a project plan. Stage 3. Identify platforms such as Tableau which could be used to develop a meaningful dashboard to display relevant information in one place to help aid decision making. Identify potential suppliers, costs and produce a project plan. The ultimate goal of the project would be that the client can make better informed and faster decisions based on real time data.
Expected areas of knowledge:	• A good knowledge of Industry 4.0 areas such as IoT, sensors to monitor machine and data capture systems. • The knowledge to be able to bring all this information together on a dashboard in a system such as Tableau or similar. • The ability to produce an implementation strategy would be an advantage. • Attention to detail • Teamworking • Good communication, • Strong IT and analytical skills
Desirable Skills:	• Experience working with agile working methodologies such as SCRUM • Working knowledge of a manufacturing ERP system • Experience with software such as Tableau or similar
Salary:	£12.00 p/h (£5,760 per placement)
Placement Start Date:	As soon as possible
Duration of Placement:	480 Hours on a full-time, part-time, or flexible schedule