Job Title: Electronics-Robotic Engineer
Company: IntelliDigest
Location: 21 Muir Place, Houstoun Industrial Estate, Livingston, EH54 5BF
Job Type: 30 hours/week
Permanent
Rate of Pay: £13.45

About Us
IntelliDigest is a purpose-driven company working with stakeholders across the food system — from farm to fork — to support the transition towards more sustainable ways of producing, distributing and consuming food. Through technological innovation and capacity building, we empower organisations and communities to drive meaningful improvements in food system sustainability.

The Role
We are seeking a highly skilled and innovative Robotics/Electronics Engineer to support the design, development, and integration of advanced electronic and robotic systems across our sustainability-focused product range. Reporting to the Robotics and Electronics Lead, you will contribute throughout the full product lifecycle—from early concept development and circuit design through to system integration, testing, and production readiness.

The ideal candidate will possess strong foundations in electronics engineering and embedded systems, with practical experience in robotic mechanisms, sensors, and control systems. You will play a key role in transforming technical ideas into reliable, manufacturable, and intelligent products that meet performance, cost, and quality objectives.

Key Responsibilities

Electronics & Robotics Design
- Support the design and development of electronic circuits, embedded systems, and robotic subassemblies to meet functional, environmental, and regulatory requirements.
- Produce and maintain high-quality schematics, PCB layouts, wiring diagrams, and component libraries.
- Develop and test prototypes incorporating sensors, actuators, motor drivers, embedded controllers, and communication interfaces.
- Work collaboratively with mechanical, software, and R&D teams to ensure cohesive and fully integrated system solutions.
- Contribute to the development and implementation of control algorithms for robotic mechanisms and automated processes.

System Integration & Manufacturing Support
- Apply Design for Manufacture and Assembly (DFMA) principles to optimise electronic and robotic assemblies for scalability, reliability, and cost-effectiveness.
- Support the identification and management of suppliers for electronic components, PCBs, and electromechanical modules.
- Assist in preparing manufacturing documentation, assembly instructions, and wiring harness specifications for low- and high-volume production.
- Monitor component lead times, availability, and obsolescence to support project planning and avoid supply chain risks.

Testing, Validation & Quality Assurance
- Support the verification and validation of electronic and robotic systems through bench testing, field trials, and performance evaluation.
- Develop and document test procedures covering hardware reliability, signal integrity, firmware functionality, and system-level behaviour.
- Assist in diagnosing and resolving hardware, firmware, and integration issues, recommending and implementing improvements where required.
- Contribute to ensuring compliance with relevant electrical safety, EMC, and environmental standards.

Project Support
- Assist in tracking project deliverables and milestones through development, integration, and production stages.
- Participate in design reviews, hazard analyses, and risk assessments relating to electronic and robotic systems.
- Maintain rigorous documentation and version control to ensure clear traceability throughout the development process.

Requirements

Essential Requirements
- Minimum of 2 years' experience in electronics engineering, robotics engineering, embedded systems, or a related discipline.
- Proficiency with electronics design software (e.g., Altium Designer, KiCad, Eagle, or equivalent) and mechanical design software (e.g., SolidWorks, Fusion 360, Inventor, or equivalent)
- Hands-on experience with sensors, actuators, motor control systems (DC, BLDC, stepper), and embedded microcontrollers (e.g., STM32, ESP32, ARM-based platforms).
- Strong understanding of analogue and digital circuit design principles.
- Ability to interpret schematics, wiring diagrams, and technical documentation.
- Bachelor's degree in Electronics Engineering, Robotics, Mechatronics, Electrical Engineering, or a relevant field.

Desirable Attributes
- Experience working within a start-up, scale-up, or R&D environment.
- Understanding of compliance and certification requirements (e.g., CE marking, EMC testing, ISO standards, RoHS).
- Competence in firmware development (C/C++ or Python), with familiarity with real-time operating systems (RTOS).
- Knowledge of robotic kinematics, automation, or control theory.
- Experience using prototyping tools, laboratory equipment, or debugging instruments (e.g., oscilloscopes, logic analysers).
- Interest in sustainable technologies or principles relating to circular electronics.
- Commitment to continuous improvement and ongoing professional development.

What We Offer
- The opportunity to work on innovative, purpose-driven technology that supports the sustainability of food systems.
- A collaborative, inclusive and supportive working environment.
- Opportunities for professional development, training and career progression.
- Mentorship from experienced technical leaders and subject matter experts.
- Flexible working arrangements that promote a healthy work-life balance.
- The opportunity to contribute to meaningful projects with tangible environmental and social impact.

Please note Employer Pathway Grant Roles are open to West Lothian Residents only and meet the below criteria:

- **Aged 16–24 and currently unemployed**, **or**
- **A parent or carer with at least one dependent child, where the parent or carer is unemployed or from a low-income household and meets the** **Parental Employability Support Fund** criteria
- Not in full-time training or education
- Candidates who have previously received funding through a West Lothian Council employment grant or an equivalent scheme administered by us are not eligible for further funding through this programme.

The employer has claimed an exception under the Equality Act 2010

To Apply

Please submit your CV and a covering letter outlining your suitability for the role to info@IntelliDigest.com.

Applications close on 30 June 2026, although applications will be reviewed on a rolling basis and early applications are encouraged.