



Embedded Firmware Engineer

The Company

Fluenta Solutions Ltd is a subsidiary of Fluenta AS, owned by Vista Holding Group which is a Norwegian based privately owned group primarily invested in by one individual called Sigurd Aase and his wife. Mr Aase is personally driven by Technology and Innovation rather than just profit and this is reflected in most of the organisations that make up the group and the 4,500 employees within them.

The principal business activity within the Vista Holding Group concerns kindergartens in Norway, however, Mr Aase has numerous other ventures including a hotel chain, a Viking ship reproduction company as well breakthrough technology businesses including an enzyme development organisation, a med-tech company (involved in innovative heart pumps) as well as Fluenta which uses ultrasonic sensing technology to measure a flare gas in the oil and gas industry.

➤ Fluenta AS

Founded in 1985, Fluenta is a global leader in the use of ultrasonic sensing technology for the measurement of flare gas primarily for the offshore oil & gas market. With a turnover of between £8 million and £10 million, Fluenta sells between 150 and 200 flare gas meters a year which gives them an estimated market share of 20%, with their main competitors being GE and Sick in Germany. The business manufactures products at a facility in Poland and has several sales offices in key oil & gas locations including the Dubai, Houston and Kuala Lumpur, as well as numerous distributors and agents across the globe.

Fluenta's meters have the capability to operate at temperatures ranging from -70 degrees centigrade to +200 degrees centigrade. However, with the global market moving towards even lower and higher temperature ranges, it is important that the business broadens its product range to stay current. This is putting huge emphasis on the engineering and technical teams who are based in the UK (Cambourne, Camps) and Poland (Gdansk) to develop new products which meet this demanding criterion.

➤ Fluenta Solutions Ltd

Founded in 2015, this shared services office is dedicated to Research and Development, Sales & Marketing and supporting the global sales effort.

For further information on the business, please visit www.fluenta.com

➤ Augvald AS

Augvald is a 3-year-old pre-revenue start-up company funded by the Vista Holding Group and is involved in the design and development of ultrasonic chemical sensing systems, which can be used in

the military to detect chemical weapons and in the environmental sector for smart meters and smart farms, as well as ultrasonic particle sensing systems, again primarily for environmental use.

The business has a relationship with Stanford University in California where much of the development takes place, and has recently initiated a business relationship with the Fraunhofer Institutes in Dresden and Stuttgart, Germany. To draw upon further external expertise, Augvald has also just established relationships with the European Environment Agency and Oslo University.

The Role & Responsibilities

Reporting to the CTO, this role is for both the Fluenta and Augvald businesses. The objective of the role is to Implement new firmware and is core to the release of new products on time, to specification at the required cost and quality. Additionally, maintenance and modification to existing firmware within existing products will be required.

The role involves:

- Creating efficient, well-structured source code in C,
- Liaising with R&D and other staff to understand requirements and specifications
- Contributing to and working from detailed specifications
- Responsibility for validation and verification of code and peer review
- Working with an established version control system and firmware release process
- Communication progress and plans to peer's and senior management

The Ideal Candidate

Experience:

- Degree level qualification in computer science, electrical engineering, physics, mathematics or similar
- 3+ years' experience in the design of embedded firmware systems for microcontrollers / DSPs
- Experience of measurement systems or sensors is desirable
- Knowledge and experience of FPGA would be desirable

Required Technical Knowledge:

- An excellent working knowledge of coding in C for microcontrollers and DSPs
 - Control loops
 - Fourier Analysis
- An understanding of electronics both analogue and digital
 - Analog to digital converters (ADC)
 - Digital to Analog converters (DAC)
 - Direct Memory Access (DMA)
- Knowledge of communication protocols
 - SPI
 - I2C
 - Modbus RTU/ASCII
- Working knowledge of source control systems (GIT/ SVN)

Personal skills:

- Able to achieve results quickly and work with minimal supervision
- Good problem-solving skills
- Responsive nature, persistent, flexible and open minded
- Good communicator - verbal and written
- Eye for detail
- Keen to hit deadlines and overcome barriers
- Self-driven, desire to make an impact and drive positive change

Location

Cambourne, Cambridgeshire.

Travel

Occasional travel will be required to other company offices predominantly in Gdansk, Poland and to 3rd party suppliers, consultants and universities with the frequency and duration based upon project deliverables.