About Flusso	Flusso is developing and bringing to market sensor products built on patented silicon-MEMS sensing technology originally developed at Cambridge University. Using a unique combination of established silicon-MEMS fabrication and packaging processes, Flusso's technology platform enables sensor products with class-leading cost-performance and is ideal for monolithic, multi-sensor integration. It will open up new consumer and healthcare market opportunities for gas sensing and fluid flow measurement – ones that cannot be served cost-effectively by competing solutions. In March 2020 we moved to a combination of remote working and Covid-secure presence in the office and labs, which continues today. We adapted quickly to online collaboration, with daily engineering "stand-ups", monthly "all hands" and other online meetings to keep everyone informed, engaged and making progress in their work. Despite challenging circumstances our business has not just maintained but increased momentum. Flusso is an ambitious yet friendly start-up with an engineering team of nine, which we will increase by three in 2021.
Purpose of the role	The purpose of this role is creation of cost-effective sensor application solutions, validation test rigs and product demonstrators that 1. Clearly demonstrate the value proposition of Flusso-based solutions; 2. Lead to customer adoption of Flusso products (against competing solutions).
Level	Senior, with significant relevant experience
Reports to	Head of Systems and Applications

Responsibilities	**Flusso product demonstrators and validation**
	• Develop a thorough understanding of customer requirements for sensing solutions to meet their application needs;
	• Create application demonstrators for Flusso sensor products and solutions:
	  ○ Designs that are proof of concept for production
	  ○ Design and assembly of custom mechanical components
	  ○ Implementation of PC software (Windows) to run the system
	  ○ System integration: electro-mechanics, fluidics, electronics and software
	• Validate Flusso-based solutions for target applications with lab testing.
	• Produce associated product sales training material and application notes.
	Customer evaluation and design-In support
	• Acquire comprehensive understanding of customers' specific application / use case requirements.
	• Assist customers during their evaluation of Flusso solutions; diagnose the root causes of any problems that arise and find practical solutions.
	• Work with customers' engineering teams to devise end-product integration solutions that meet or exceed their specific application requirements.
	• Train distributor field application engineers (FAE's) and provide design-in support to them when necessary.
	Post-sales support
	• Assist customers with the investigation of any issues that arise with Flusso-based solutions and help them move forward.
	General
	• Design and assemble custom fixtures for the test engineering group.
	• Contribute to program, project and sprint planning.
	• Contribute to the creation of Flusso IP.
	• Maintain personal tasks on a team JIRA board and schedule work in line with project plans, coordinated with the activity of colleagues.
	• Report personal task status and results in project team meetings.

Accountabilities	• Understanding of customer requirements and target applications. • Timely delivery of work into new product development projects; • High quality delivery of work across Systems and Applications. • Smooth progress and successful outcomes of customer evaluations. • Successful conversion of design-in opportunities with customers to design-wins.

Key internal relationships	**Product/marketing managers:** for understanding of target applications, product use cases, customer needs and demonstrator requirements. **Technical leads:** for agreement of application engineering requirements and solutions. **Hardware engineers:** for collaboration on electronics design and prototyping for application demonstrators. **Software engineers:** for collaboration on application demonstrator firmware and host PC software. **Project managers:** for understanding of project plans, timescales and priorities. **Test engineering:** for specification and design of fixture solutions.
Key external relationships	**Customers:** to give assistance during product evaluations, capturing of application requirements and support during design-in activity. **Prototyping/fabrication service providers**, for rapid manufacturing of mechanical system components. **CAD tool and cloud platform providers**, to extract full value from licences and subscriptions.
Qualifications, knowledge, skills & experience	Bachelor's degree in a relevant Engineering or Science subject. Must be skilled and experienced in • Electro-mechanical-fluidic system design • Mechanical design using Solidworks or a similar tool • Rapid prototyping using 3D printing, machining and other methods • Analogue and digital, board-level electronics design and debug (e.g. Raspberry PI or Arduino) • Software development to run demonstrators and test equipment Knowledge and/or experience of these subjects would be an advantage • Flow and gas sensing • Fluid dynamics – analytical methods, modelling and simulation • Silicon-MEMS technology and semiconductor/MEMS packaging • Experience in any of the following: Python, C, C++, C#, WPF, Labview

Profile	Positive and enthusiastic by nature, responsive to changing needs of projects and the business. Good interpersonal, communication, and presentation skills. A creative problem solver who is able to create application solutions that meet customer needs. Someone with a pragmatic engineering perspective and solid theoretical foundations. Detail conscious and acutely aware of the importance of • Complete and well-defined requirements for system solutions • Careful management and control of design information Inspires confidence in colleagues, partners and customers by virtue of domain knowledge, expertise and experience; Well-developed practical skills for system building and testing. Thorough and accurate in pursuit of high quality engineering solutions. Comfortable working in a fast-paced, start-up environment.