



## 1 Advertisement

**Post Title:** Software Engineer (KTP Associate)

**School/department:** School of Engineering and Informatics, Informatics Department

**Hours:** 1 FTE

Requests for flexible working options will be considered (subject to business need).

**Contract:** fixed term until April 2024

**Reference:** 7584

**Salary:** starting at £34,304 to £44,706 per annum, pro rata if part time

**Placed on:** 21 December 2021

**Closing date:** 4 February 2022. Applications must be received by midnight of the closing date.

**Expected start date:** As soon as possible

Are you looking for an exciting opportunity to develop your career in software engineering?

The University of Sussex have teamed up with Sprint Electric Ltd, to offer this exceptional Software Engineering role based at their offices in Arundel, West Sussex

The project will develop an Industry 4.0-ready software suite, based on state-of-the-art web and cloud technologies, that will facilitate the configuration of complex motor controller hardware and the streaming, visualisation, aggregation and analysis of data in the cloud from multiple similar devices.

If you're a talented individual with a background in computer science and web technologies looking for a new challenge and to take control of your own project, then make sure you take advantage of this rare opportunity.

This 24-month project offers a £33k-£44k pa salary plus additional benefits such as a generous training budget, visits to European trade shows and academic support throughout.

Please contact Dr George Parisi, [G.Parisi@sussex.ac.uk](mailto:G.Parisi@sussex.ac.uk) for informal enquiries.

Please note that this position may be subject to [ATAS clearance](#) if you require visa sponsorship.

The University is committed to equality and valuing diversity, and applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in Science, Technology, Engineering, Medicine and Mathematics (STEMM) at Sussex.

For full details and how to apply see our [vacancies page](#)

*The University of Sussex values the diversity of its staff and students, and we welcome applicants from all backgrounds.*

## 2. The School / Division

Please find further information regarding the school/division at

<https://www.sussex.ac.uk/ei/>  
<https://www.sussex.ac.uk/informatics/>

## 3. Job Description

Job Description for the post of: Software Engineer (KTP Associate)

<b>Department:</b>	<b>Department of Informatics</b>
<b>Section/Unit/School:</b>	<b>School of Engineering and Informatics</b>
<b>Location:</b>	<b>Based at Sprint Electric Ltd Headquarters, Arundel, West Sussex</b>
<b>Grade:</b>	<b>7</b>
<b>Responsible to:</b>	<b>Robin Fells</b> (Company Supervisor) & Dr George Parisis (Academic Supervisor)
<b>Responsible for:</b>	NA

### Job description and overview

Sprint Electric Ltd and the University of Sussex are looking to recruit a dynamic and highly skilled, qualified graduate as a Software Engineer (Full Stack Developer). You will lead and deliver a project developing an industry 4.0-ready software suite based on state-of-the-art web and cloud technologies that will facilitate the configuration of complex motor controller hardware and the streaming, visualisation, aggregation, and analysis of data in the cloud from multiple similar devices working alongside a multi-disciplinary team of R&D engineers.

This position forms part of the Knowledge Transfer Partnership (KTP) programme co-funded by a grant through Innovate UK. It is essential that the post holder understands how KTP works with business and the University, and the vital role you will play if you successfully secure this position. KTPs offer a wide range of benefits including access to a £4,667 Personal Development budget to upskill during the project.

## **Main accountabilities and responsibility areas**

### **Accountabilities**

1. To lead on and deliver successful project outcomes in collaboration with University of Sussex and Sprint Electric Ltd throughout the whole product lifecycle
2. To provide regular reports and presentations to Sprint Electric and University senior management team members updating them on project progress
3. To evaluate and review technologies used and recommend changes to the project plan as necessary determined by research findings

### **Responsibilities**

1. Project management
  - 1.1 To lead and deliver agreed project outcomes in collaboration with University of Sussex and Sprint Electric Ltd throughout the whole product lifecycle
  - 1.2 To provide regular reports and presentations to SEL and University senior management team members updating them on project progress
  - 1.3 To evaluate and review technologies used and recommend changes to the project plan as necessary determined by research findings
2. Research and development
  - 2.1 To lead on the development of the product throughout the whole product lifecycle engaging with engineering teams and Sprint Electric customers as and when necessary
  - 2.2 Develop research objectives and proposals with senior Sprint Electric and University colleagues
  - 2.3 Conduct research individually and in collaboration with others
  - 2.4 Analyse and interpret research findings and draw conclusions on the outcomes
  - 2.5 Participate in internal networks and relevant external networks to share learning with peers and project board members
  - 2.6 Continually update knowledge and understanding in field and engage in continuous professional development opportunities offered in Company, through activities offered at University of Sussex and through the KTP programme
3. Collaborative working with KTP partners
  - 3.1 Attend and deliver presentations on project progress at regular KTP meetings
  - 3.2 The role holder will liaise regularly with senior management team members across multiple sites and will be expected to attend conferences to network with businesses to update knowledge and skills

### 3.3 Understand how the KTP process works to support Business and University partners and outputs

#### **Decision Making and Problem Solving**

The role holder will be project lead, managing their own workload and ensuring outputs are delivered on time. Creative thinking and decision making will be required to explore all possible technical solutions and determine changes to those used, adjusting, developing, and reporting on the project plan accordingly. The role holder will direct problem-solving activities and their own learning with the support of in-company and University supervisors. The role will recommend and agree project changes with the Local Management Committee (LMC) members according to research findings. They will advise on any changes or impacts to manufacturing processes that may be required as a result of developing the new products during the project.

#### **Major Deliverables**

To understand how the KTP process supports and delivers outcomes for both the University and business partners

To deliver project outputs as determined by the agreed KTP project plan

To report on project progress and recommend changes in response to research findings

To bring products to market in liaison with Sprint Electric Ltd sales support colleagues and with the support of Company and University supervisors

To work collaboratively with all KTP partners, customers, and teams across the Sprint Electric Ltd company to achieve successful project outcomes.

To act as a conduit for knowledge exchange proactively sharing research findings and providing expert support to colleagues within the company, agreed networks and through regular attendance at research group meetings at University.

To share learning with Sprint Electric Ltd colleagues and the academic and student community supporting a better understanding of the technologies amongst appropriate networks

To work collaboratively with all KTP partners and teams across Sprint Electric to achieve successful project outcomes.

To liaise with a range of different stakeholders at different levels of seniority and with different degrees of technical knowledge, including leading on presentation of project updates to company director and senior academics on a regular basis at LMC meetings; sharing knowledge and learning with academics and students at research group meetings; translating research

findings and product capabilities to non-technical company employees involved with sales and marketing as part of product handover and launch

#### 4. Person Specification

The following qualifications, knowledge, experience, skills, and competencies are required:

<b>ESSENTIAL CRITERIA</b>
<b>Qualifications and professional accreditations:</b>
A Bachelor's degree in Computer Science (or equivalent), or significant experience in developing web and cloud systems, demonstrable by previous experience in the industry.
<b>Skills and competencies:</b>
<ul style="list-style-type: none"><li>• Excellent programming skills</li><li>• Evidence of independent contribution to the development of substantial software development projects</li><li>• Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues, and external audiences (e.g., sales, product, marketing teams and customers)</li><li>• Ability to work individually on own initiative and without close supervision, and as part of a team</li><li>• Ability to exercise a degree of innovation and creative problem-solving</li><li>• Excellent organisational and administrative skills</li><li>• Ability to prioritise and meet deadlines</li></ul>
<b>Knowledge areas:</b>
<ul style="list-style-type: none"><li>• Full-stack application development, with experience in e.g., Django, Ruby on Rails, or Node.js</li><li>• Relational and NoSQL databases</li><li>• REST</li><li>• State-of-the-art software development tools and agile methodologies for developing large-scale software systems</li><li>• Software testing techniques</li><li>• Security of web systems</li></ul>
<b>PREFERRED CRITERIA</b>
<b>Qualifications and professional accreditations:</b>
A Master's degree in Computer Science (or equivalent), or significant experience in developing web and cloud systems, demonstrable by previous experience in the industry.
<b>Skills and competencies:</b>
<ul style="list-style-type: none"><li>• Excellent written and verbal communication skills including delivering presentations to corporate senior management team and to academic research group also ability to write and deliver technical reports</li></ul>
<b>Knowledge areas:</b>

- Experience with modern front-end frameworks, e.g., React, Angular or Vue.js
- The WebSocket API
- Creating native apps for Android and iOS (e.g., using React Native)
- Application development for the Cloud (e.g., AWS, Azure)
- Time-series databases and visualisation techniques (e.g., Grafana, InfluxDB)
- Motor controller applications and monitoring systems
- Embedded Linux deployment and application development