Graduate Developer

Oxfordshire or Norfolk, work-from-home (any location) possible. £25k - £30k. 4 day working week with the possibility for the position to be part time on a pro rata basis.

Emergent Design

Emergent Design is a small company that produces industrial production monitoring and automation QA systems for factories across Europe. We manage suppliers who provide mechanical and electronic design and production services along with on-site service engineers. We generate the specialist software required to operate the systems in-house, with a strong emphasis on image processing and modern UI design. We develop on and design for an open source linux-based stack. Our primary development languages are modern C++ for back-end code and Dart for user interfaces. We are entering a period of expansion and are seeking team members who are keen to play a part in shaping a growing company.

The Role

This is a role for a graduate keen to develop the skills required to work on complex industrial systems, design and implement new features, improve and optimise existing code and find innovative solutions to real-world problems. You'll be developing software which operates directly on substantial hardware and interacts with live production lines.

Depending upon your strengths and interests you may specialise in browser based user interface design, back-end infrastructure, image processing (including but not limited to machine learning), or a combination of the above.

Candidates should have graduate level programming experience, good communication skills and a desire to learn. You can expect to shadow an experienced team member as you learn about our projects, software and processes. Emergent is keen to help the right candidate to gain a wide range of skills and experience so that you progress rapidly to taking on more responsibility and autonomy within the company.

As a small business the range of activities you will be involved with is wide; you will have the opportunity to specialise in the areas that most appeal to you,

The role is currently home-based, with the development team using tools such as Google Workspace and Gitlab to operate as a distributed office. There may be the opportunity to introduce an element of more traditional office-based work if you prefer. Site visits (outside the UK) constitute a relatively small part of the role but may be required on occasion.

Necessary skills

- Object-oriented programming experience
- Modern C++ using the standard template library.
    - Web development experience (ideally in Dart) would be a bonus.
- Familiar with git source control
- Debugging software
- Good communication skills
- Ability to work independently, manage your own time and set your own goals as part of a larger team.

Experience and Training

You will have the opportunity to gain experience, with guidance from an experienced engineer, in areas such as:-

- Linux command-line usage
- Toolchain configuration
- Bash scripting
- Writing technical and user documentation
- Architectural design
- Multithreaded programming
- REST and websockets
- Web development (in Dart)
- Key-value database (redis) usage
- Packaging software for Debian-based linux systems
- Working on collaborative and cross-disciplinary projects
- Developing mathematical skills in fields such as statistics, trigonometry and 3D geometry, vector calculus and linear algebra, optimisation, and neural networks
- Image processing
- Reading, understanding and developing code from academic papers
- Developing for, and working in, industrial environments.
- Coding for hardware.

Working environment

- Self guided work - significant amount of autonomy expected
- Working primarily from home (potential to move to home/office split at your preference)
- Flexible working hours
- Potential for visits to assembly houses (UK-based)
- Potential for site visits (various European locations)
- 28 days annual leave in addition to public holidays
- Four day working week (potential for a shorter working week on a pro-rata basis)

Take a look at our website at https://emergent-design.co.uk/ to learn more about us.

If you're interested in the position then email justen@emergent-design.co.uk and introduce yourself. Please include your c.v. and specify the role you're interested in.