

Summer Internship 2025 Software Engineer

Job title: Software Engineer Intern Location: Guildford, United Kingdom Type: Fixed term between 4 and 10 weeks

About Cocotec

Cocotec is a spinout company from the University of Oxford, having launched in 2019, and is headquartered in Guildford, UK. With a passion for software and an obsession with quality, we specialise in building tools for developers to help them dramatically improve software quality, accelerate delivery, and reduce costs. We work with global companies across sectors, such as semiconductor, medical and defence industries, and our tools are already being used to develop millions of lines of production code controlling some of the world's most advanced systems.

Our product, Popili, is a modern development tool that brings the power of automated formal verification to the user's existing software development environment. By using Popili, developers can eliminate entire categories of complex errors much earlier during the design and implementation phases of their system, which means the quality of their software entering test and integration phases is much higher. In turn, this significantly reduces the burden of testing at the later stages, allows a smarter testing strategy to be used, and results in higher quality products delivered on shorter, more predictable timeframes. One of core features of Popili is Coco, a modern programming language designed specifically for building event-driven software. Users write their software in Coco, automatically verify whether its correct using our bespoke formal verification tool, fix any errors found, and then generate code in C++, C or C#. Popili is designed to scale for industrial use, and for widespread general use across development teams, without the need for any expertise in formal verification.

We have an exciting technology stack, ranging from a frontend VSCode plugin written in Typescript, to the backend Coco-language technology and verification tool written in C++. We also deploy many services written using Rust, and are looking to use more Rust where possible. We use many open-source technologies to build our tools including Bazel, Eclipse, gRPC; Kubernetes; Language Server Protocol; LLVM; and VSCode.

We're seeking to grow our team with highly talented and motivated developers, who share our passion for building great software.

About the role

We're looking for a smart, highly motivated computer science student to join us for an internship over the summer 2025. You will be working on challenging projects for



the duration of your internship, providing meaningful and interesting work experience with high expectations of performance. You'll collaborate with different members of the team, including our CTO, who is one of the founders and driving force behind our innovation and software.

The duration of this internship is flexible with a minimum of 4 weeks, and you must have the right to work in the UK. During this internship you will work on one or more projects that we will tailor according to your skills and what we are working on at the time. For example:

- Create a demonstrator of how to use Popili and Coco by creating demonstrations that are controlled by software built in Coco. This might additionally involve creating Lego models, for example.
- Experimenting with using AI to enhance specific aspects of our product.
- Experimenting with ways of improving the performance of the formal verification engine.
- Working on actual production issues alongside our existing development team.

Essential skills:

- Demonstrable experience of programming in any programming language, for example, as part of your degree, from previous work experience, coding competitions, or coding projects you have pursued in your own time.
- Quick problem-solving capabilities.
- Self-motivated, and able to work independently as well as part of a team.
- A passion for exploring new technologies.
- Basic familiarity with a version-control system such as Git.

What we offer

We offer a competitive salary, partial remote working, and flexible working hours.

Applications

To apply for an internship with us, please send a cover letter and your CV to recruitment@cocotec.io. If you have any further questions about this role, then do get in touch with us, as we would be delighted to have a chat with you about it.

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