Optalysys

Embedded Software Engineer

Job Specification

About Optalysys

Enabling a world of secure computing. Harnessing the power of light, we push the boundaries of what is possible in data security by bringing speed to always-encrypted data technology. Through optical computing, we accelerate Fully Homomorphic Encryption (FHE) beyond the capabilities of electrical computing, making secure data sharing and collaboration a reality for everyone, everywhere.

We are committed to building a home for exceptional talent.

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What is the Role?

We are looking for an experienced embedded software engineer to develop embedded software for Optalysys' photonics and digital platform which is to be used to provide fully homomorphic encryption (FHE) solutions. The digital platform will contain an in-house developed System-on-Chip (SoC) containing an embedded ARM processor.

You will be responsible for the delivery of embedded software for this device. The major tasks will be:

- Documenting and writing code to help with pre-tapeout verification
- Helping in system bring-up
- Defining and requirements capture for mission mode software
- Defining, tracking and reporting engineering metrics to demonstrate progress towards completion
- On time delivery of the design against agreed metrics and sign-off

About You

We are looking for somebody with a strong background in C. You will need to be collaborative, an excellent communicator and able to work in a fast-changing environment. You will have:

- Experience in C
- Experience in Python
- Experience in building embedded systems
- Knowledge of ARM architecture and its ISA
- Knowledge of SoC architectures and concepts
- Experience in using various testing frameworks
- Experience in writing secure code
- Experience in writing specifications, test plans and reports
- The ability to communicate clearly with both expert and non-expert audiences

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You may also have:

- Knowledge of using JIRA
- Knowledge of Jenkins
- Knowledge of performance analysis
- Experience of using debugging tools using SWD and JTAG
- Knowledge of RTOS
- Knowledge of other ISAs