



Amaze yourself.
Amaze the world.

Silicon Validation Intern

Job Summary:

At Apple we believe our products begin with our people. By hiring a diverse team, we drive creative thought. By giving that team everything they need, we drive innovation. By hiring incredible engineers, we drive precision. And through our collaborative process, we build memorable experiences for our customers.

These elements come together to make Apple an amazing environment for motivated people to do the greatest work of their lives. You will become part of a hands-on development team that strives to set the standard in cultivating quality, creativity and innovation. Will you help us design the next generation of revolutionary Apple products?

Job Description:

Apple's Silicon Engineering Group (SEG) designs and implements the chips that help make the Apple Watch, iPhone and iPad world class products. The A11 SoC in the iPhone 8/8 Plus, is a recent example of our engineering capability.

Working within SEG, the Silicon Validation (SiVal) team employs embedded software engineers (writing code to interact with all the blocks in the SoCs), scripting gurus (web development, automated test framework), lab test engineers (look for silicon bugs) and triage engineers (debug silicon issues). Working with iOS engineers and logic designers, we ensure that our chips are extraordinarily well implemented and fabricated, performing as specified. We're looking for self-motivated engineers passionate about "how things work" to jump in and join us in any of our roles.

Key Qualifications:

- Proficiency in C and/or assembly level programming.
- Proficiency in scripting (e.g. Tcl/Expect, ruby, Python, Perl).
- Experience in low-level programming (e.g. kernel, drivers, RTOS, bare-metal).
- Familiarity with computer lab and lab equipment.
- System level perspective (knowledge of memory hierarchies, bus protocols, synchronization mechanisms, IO devices are all pluses).
- A commitment to understand the details of the operation of a system.

Areas of expertise within Silicon Validation include:

CPU Data Motion Engineer

In this highly visible role, you will write code to push data throughout the system in an effort to stress logic responsible for handling data, and to observe the behavior through instrumentation.

Media IP S/W Engineer

Apple's products are known for their high-performance graphics and their image processing. A collection of media blocks play a central role and you can work with these agents to ensure that all modes of imagery and the full range of capabilities are utilized.

Connectivity IP S/W Engineer

Apple's products have an excellent deal of internal I/O for communication between wireless, cellular, and storage devices. In this role you will be writing code to engage these communication channels and put them through their paces.

Web developer

Use modern full-stack web technology to implement solutions for running the lab, the devices within, the software tests they run, and the result data they generate.

Test and Triage Engineer

Gain experience in post-silicon validation (bringup, testing, debug). Execute silicon test plans in the lab, triage in-system failures resulting from complex interactions between system software and the chip.

Education:

Pursuing a Bachelor's or Master's degree in Computer Engineering, Electrical Engineering or Software Engineering

Apple is an Equal Employment Opportunity Employer that is committed to inclusion and diversity. We also take affirmative action to offer employment and advancement opportunities to all applicants, including minorities, women, protected veterans, and individuals with disabilities.