Software Engineer, Embedded Software, Silicon

Minimum qualifications:

- Bachelor's degree in Computer Science, or equivalent practical experience.
- 2 years of experience coding in C or C++.

Preferred qualifications:

- Master's degree in Computer Science, or equivalent practical experience.
- Experience with firmware development and android system software development.
- Experience with Graphics Processing Unit (GPU) or Tensor Processing Unit (TPU) or Digital Signal Processing (DSP) pipeline.
- Experience with linux kernel device driver development and debugging.
- Experience with ARM System on a Chip (SoC) architecture.
- Knowledge of Operating System fundamentals.

About the job

Google's software engineers develop the next-generation technologies that change how billions of users connect, explore, and interact with information and one another. Our products need to handle information at massive scale, and extend well beyond web search. We're looking for engineers who bring fresh ideas from all areas, including information retrieval, distributed computing, large-scale system design, networking and data storage, security, artificial intelligence, natural language processing, UI design and mobile; the list goes on and is growing every day. As a software engineer, you will work on a specific project critical to Google’s needs with opportunities to switch teams and projects as you and our fast-paced business grow and evolve. We need our engineers to be versatile, display leadership qualities and be enthusiastic to take on new problems across the full-stack as we continue to push technology forward.

Google's mission is to organize the world's information and make it universally accessible and useful. Our team combines the best of Google AI, Software, and Hardware to create radically helpful experiences. We research, design, and develop new technologies and hardware to make computing faster, seamless, and more powerful. We aim to make people's lives better through technology.

Responsibilities

- Design and develop the system software stack, linux kernel driver, microcontroller firmware, and secure firmware needed to enable subsystems on pixels and other embedded devices.

- Design and develop other tools and infrastructure to help Application-specific integrated circuit (ASIC) design verification, tapeout, bring up, software debug and performance analysis, and productization.
- Design software support for future machine learning accelerators and define how these interoperate with other compute offload devices.