Huawei Hong Kong Research Center

Huawei Hong Kong Research Center was established in 2018, focusing on chipsets, software engineering, AI, and theoretical researches. We are currently seeking high-caliber Engineers and Researchers at all levels to join our new team.

Job Highlights

- R&D
- CPU/AI Architecture
- C++ programming experience

(Senior) Performance Modeling Engineer

You will take part in evaluating current micro-architecture of different major functional units of a processor/AI core and contribute to the various phases of the development work, including but not limited to feasibility studies, performance and functional modeling, software benchmarking, micro-architecture definition. You will work closely with the architects and the team to deliver the processor core architecture that meets the requirements of high performance, low power, and scalability for CPU/AI application.

Responsibilities

- Interact with the architects, software teams and to evaluate the microarchitecture of the CPU/AI core units
- Develop performance and functional model
- Ensure performance correlations between hardware implementation and model

Qualifications

- Bachelor or higher degree in Electronic/Computer Engineering with experience in hardware modeling
- Must demonstrate ability to take micro-architectural concepts to cycleaccurate/approximate models
- Experience with C++ programming experience and familiarity with generic programming techniques (e.g. templates) is required
- Experience with object oriented software development and class hierarchy.
- Competency with the typical data structures (various lists, trees, hashes, etc.) and algorithms. Must be able to analyze algorithm complexity, and select the most suitable data structures/algorithm according to the task
- Experience with the design/verification/modeling in one or more of the following disciplines

- Good understanding of computer system architecture, memory systems or cache coherency
- Good understanding of different instruction set architecture (General Processor, DSP, GPU)
- Experience with SystemC and QEMU is highly desirable
- ESL: knowledge of system-level development tools from 3rd party EDA vendors including Carbon, Mentor, Synopsys, etc.
- Good command of written and spoken English and Chinese (Mandarin);
- Good team player with strong communication skills.

For interested parties, please send your full resume with and salary expectation to: <u>chung.pui.yi@huawei.com</u>. Applicants who are not invited for interview within 6 weeks may assume their application unsuccessful.