

THE ROLE:

AMD is looking for an influential software engineer who is passionate about improving the performance of key applications and benchmarks. You will be a member of a core team of incredibly talented industry specialists and will work with the very latest hardware and software technology.

THE PERSON:

The ideal candidate should be passionate about software engineering and possess leadership skills to drive sophisticated issues to resolution. Able to communicate effectively and work optimally with different teams across AMD.

KEY RESPONSIBILITIES:

- Innovate and develop novel Router algorithms to get multi-fold performance improvements (QoR, Compile Time, Memory Usage)
- Be involved in the design, implementation, analysis, and test of FPGA physical implementation tools which include optimization, placement, timing, and routing.
- Perform research and development of novel algorithms and optimization of existing algorithms to improve quality of results (QOR), runtime, and memory.
- Conduct research and development of novel placement/routing and optimization techniques for next-generation FPGAs.
- Evaluate new FPGA architecture features and their impact on existing implementation tools.
- Stay informed of software and hardware trends and innovations, especially pertaining to algorithms and architecture
- Design and develop new groundbreaking AMD technologies
- Debugging/fix existing issues and research alternative, more efficient ways to accomplish the same work
- Develop technical relationships with peers and partners

PREFERRED EXPERIENCE:

- In-depth knowledge of Data Structure, Graph Theory and Algorithms
- Solid Programming skills in C++
- Strong object-oriented programming background
- Knowledge of training and deploying ML models for EDA applications
- Ability to write high quality code with keen attention to detail
- Experience with modern concurrent programming and threading APIs
- Experience with software development processes and tools such as debuggers, source code control systems (GitHub) and profilers is a plus
- Effective communication and problem-solving skills

ACADEMIC CREDENTIALS:

- Bachelor's, Master's, or PhD degree in Computer Science, Computer Engineering, Electrical Engineering, or equivalent