

Job Description - Software Engineers

Minimum qualifications:

- Bachelor's degree in Computer Science, similar technical field of study or equivalent practical experience.

- Experience programming in one or more general purpose programming languages including but not limited to: Rust, Scala, C++, Java, C and Python.

- Experience in at least two of the following: web/mobile development, Unix/Linux environments, distributed/parallel systems, machine learning, networking, large software systems development, and security software development.

Preferred qualifications:

- Master's or PhD degree in Engineering, Computer Science or other technically related fields.

- Experience with Rust or other major functional programming languages, such as OCaml, Scala, and Haskell.

- Experience in a wide variety of projects utilizing artificial intelligence, data compression, and machine learning technologies.

- Excellent written and verbal communication skills.

About this job

FuriosaAl's software engineers develop the most powerful next-generation Al chip in the world. Our products need to handle various kinds of DNN models - from vision and NLP to GNN models - and various patterns of workloads. To achieve the challenging goals, we run vertically integrated engineering teams for researching DNN models, building software stacks, and designing hardware architectures. The co-designing efforts and the vertically integrated engineering efforts are the driving force of FuriosaAl.

FuriosaAI is looking for highly motivated and talented software engineers to bring fresh ideas and robust foundations from all areas including DNN model compilation, hardware virtualization, highly efficient runtime over multiple machines; the list is expanding in every area of software engineering every day. We need our engineers to be versatile, have an aspiration for perfection, and be enthusiastic to explore new problems and ideas beyond the given tasks to push the boundaries.

As a software engineer, you will have opportunities to work with people with diverse backgrounds. To roll out the most powerful next-generation AI chip to the world and to compete with tech giants, we don't set any limitations on who you work with, where you work, or when you work. You will tackle the most challenging problems in the world with us.



Responsibilities

- Software engineers in general
 - \circ $\,$ Design, develop, test, deploy, maintain, and improve software $\,$
 - Work on compiler, runtime, and various SW development tools, including visualization and testing frameworks.
 - Work on various operation tools, such as chip monitoring systems and multi-machine resource management and scheduling systems.
- Algorithm and DNN model engineers
 - Research DNN models, quantization scheme, and ML compilation ecosystem.
 - Design and implement DNN model toolchains, such as quantizer, accuracy checker, and graph level optimization & modification tools. The toolchains are responsible for the front-ends of the compiler.
- Security engineers
 - Ensure hardware securities in general and support building a safe HW virtualization environment through designing and harnessing hardware security components (e.g., TrustZone).
 - Find security flaws in software stacks, such as compiler, runtime, and especially firmware.
- Internal operation engineer
 - Build internal systems (e.g., a portal web of FuriosaAI) for efficient operation of FuriosaAI.
 - Build system-to-system integration based on proper authentication, authorization, and accounting, e.g., integration of VPN 3A and G Suite LDAP; and cloud server 3A and G Suite LDAP.
 - Build a massive scale of testing infrastructure for both hardware and software teams.
 - Provide general software engineering supports for the engineering teams.

Contact Information

Please send your resume to <u>recruit@furiosa.ai</u>