

Job Category: Research

Primary Location: Santa Clara, CA, US (Remote Possible)

Job Type: Full-time

Job Title: Research Scientist

Job Description

The Machine Programming Research group at Intel Labs is seeking a motivated full-time research scientist in the area of machine programming (MP), with an emphasis on stochastic (e.g., machine learning) or deterministic (e.g., formal methods) techniques.

In this position, you will be responsible for researching and prototyping new machine learning, formal methods, and machine programming systems. You will take initiative and work with other Intel Labs' researchers and across Intel business units to conduct cross-collaborative MP research and engineering. You will identify and research promising technologies typically 5-10 years prior to product development. This requires an understanding of state-of-the-art techniques in machine learning, formal methods, programming languages, compilers, systems, and computer architecture.

Minimum Qualifications:

Ph.D. in Computer Science, Electrical Engineering, Computer Engineering or other related areas.

- 2+ lead authored machine programming publications in a tier-1 conference (e.g., MAPS, NeurIPS, ICML, ICLR, MLSys, ASPLOS, PLDI, ISCA, OOPSLA, etc.).
- 3+ years of software development skills in at least two programming languages (e.g., C, C++, Python, Rust, etc.)
- Independent researcher who can function autonomously
- Excellent problem-solving skills
- Strong knowledge and practical experience in machine learning and formal methods, including development of formal program synthesizers or deep learning models for MP
- Excellent written and spoken communication skills

Additional Qualifications:

- 2+ years of industry experience in software and/or hardware engineering

Inside this Business Group:

Intel Labs is the company's world-class, industry leading research organization, responsible for driving Intel's technology pipeline and creating new opportunities. The mission of Intel Labs is to deliver breakthrough technologies to fuel Intel's growth. This includes identifying and exploring compelling new technologies and high-risk opportunities ahead of business unit investment and demonstrating first-to-market technologies and innovative new usages for computing technology. Intel Labs engages the leading thinkers in academia and industry in addition to partnering closely with Intel business units.