

Software Engineer Compiler Development - 2254**Job Type:** Full-Time**Location:** MN, Mendota Heights**Last Updated:** 10/12/2006[Submit Your Application](#)[Send to a Friend](#)**Job Description:****Position Summary:**

Work on improving the optimization and parallelization phases of the Cray Fortran, C, and C++ compilers. This includes both significant research and product development activities, as Cray continues to advance the state of the art with automatic parallelization capabilities across dissimilar architectures.

Develop, champion, and implement the parallel programming models Unified Parallel C (UPC) and Co-Array Fortran (CAF) in Cray's compiler, as well as developing and implementing new language features to support thread-level parallelism in high level languages.

Enhance performance of parallel programs.

Maintain compliance with evolving language standards.

Adapt parallel programming models to new Cray architectures.

Requirements:

Advanced degrees are welcome, but a minimum B.S. Computer Science or a similar discipline is required. An additional requirement is a minimum of five years of experience in working with large projects, or an advanced thesis in an appropriate area.

Experience in compiler development is highly desired, but not essential for the right candidate. Excellent understanding of HPC architectures, including multiprocessors and distributed memory systems. Substantial experience programming in C and C++. Proficiency in Fortran is a plus, but not required. A commitment to sound software engineering principles.

Outstanding problem solving skills. Ability to work well in a cooperative development environment, both within and across teams. Good written and verbal communication skills are required. For this position, U.S. citizenship is required.

