

POSTDOCTORAL POSITIONS AT MIT

Parallel Computing and Compilers

MIT CSAIL Supertech Research Group

Cambridge, Massachusetts, USA

The Supertech research group in the MIT Computer Science and Artificial Intelligence Laboratory seeks multiyear Postdoctoral Associates to join the **OpenCilk** development team led by Professor Charles E. Leiserson, Dr. Tao B. Schardl, and Research Scientist Dorothy Curtis. The open-source OpenCilk software platform, a new implementation of the Cilk parallel-programming platform, will feature a superior compiler based on the Tapir/LLVM compiler (Best Paper, PPOPP 2017), a new work-stealing runtime system, and a suite of parallel-programming productivity tools. Candidates should be recent Ph.D. graduates in computer science and engineering with excellent C/C++ programming skills and publications in one or more of the following areas:

- parallel computing (particularly multicore);
- language runtime systems and compilers (especially LLVM);
- software productivity tools;
- user interface design and implementation;
- software performance engineering (writing fast code);
- algorithms and data structures;
- software engineering, testing, benchmarking, and/or release management;
- cloud environments and operating systems.

The Postdoctoral Associate position carries no teaching obligations, although teaching opportunities are possible for those interested, as well as opportunities to supervise undergraduate and graduate students. Besides participating in the OpenCilk team, a postdoc may spend up to half their time pursuing independent research.

Prospective candidates should email a brief statement of interest to Prof. Leiserson, Dr. Schardl, and Ms. Curtis at {cel,neboat,dcurtis}@mit.edu. Please attach your CV, two exemplary research papers, a sample of your C/C++ code, a slide deck of a presentation, a list of three references (two academic), and anything else that you feel might be relevant.

Useful links

<http://www.opencilk.org>
<https://people.csail.mit.edu/cel>
<http://web.mit.edu/neboat/www>
<http://cilk.mit.edu/tapir>
<http://supertech.csail.mit.edu>
<http://www.csail.mit.edu>
<http://web.mit.edu>

