#### **Aspiring PI Info:**

- Sreepathi Pai
- Associate Professor of Computer Science
- University of Rochester



### **Research interests:**

- Compilers for DSLs
- Parallel Computing (GPUs)
- · Computer Architecture
- · High Performance Computing
- Formal Methods

# **Current Project(s)**

- · GPU Performance Portability Tuning
- Simulating Large scale ML Workloads
- Formalizing NVIDIA's GPU Instruction Sets
- Compiler Correctness
- Formal Methods for Performance

# **Project Idea(s)...**

SMT Solver Parallelization and Performance

# ... and possible collaborators sought

- (Field) FM-aided Cross-Layer Optimizations
  - Break layers of abstraction safely
- (Field) Programming models for noisy computation systems
  - Analog systems

