Aspiring PI Info:
- Elena Sherman
- Associate Professor
- Boise State University

BOISE STATE UNIVERSITY

Research interests:

- Static program analysis
- Abstract interpretation
- Decision procedures (SMT solvers, string constraints)
- Benchmarking verification

Current Project(s)

- Domain-specific string constraint solvers
- ARG-V: Automatically obtaining realistic program benchmarks for verification (NSF 2346326)
- Searching for best abstract domains (NSF 1942044)

Project Idea(s)…

- Idea: Educate scientific computing students about formal methods, who has no formal background in computer science
- Impact: better scientific software
- Challenges: what aspects of formal methods to teach? how to customize them to scientific computational problems?
- Transition to practice: Bring best practices and educational material to national labs

… and possible collaborators sought

- In the field: scientific computing developers, computational math researchers
- Formal methods: formal method educators, Researchers working on verification of scientific software