Aspiring PI Info:
- Andrew K. Hirsch
- Assistant Professor
- University at Buffalo, SUNY

Research interests:

Concurrency, type theory, semantics, information-flow security, logic, verification

Project Idea(s)…

- Choreographic languages and libraries for scientific computing
- Choreographies for proven-correct distributed systems and databases
- Choreographic programming of swarms
- Verification for cyber-physical systems

Current Project(s)

I'm currently working on the theoretical foundations of *choreographic programming*, a paradigm for deadlock-free concurrent programming. This has applications in secure-by-construction programming, as well as correct distributed and multithreaded systems.

… and possible collaborators sought

- Anyone in a field where correct communication is important, especially with codesigned components
- Especially roboticists with formal-methods and logic backgrounds