Project Overview

- (Broadly) Algorithms & Information Theory
- (Focus) Algorithms for error-correction
  - Using list-decoding
  - To correct errors in communication media
    - More errors
    - More efficiently
    - For more codes
Progress Through December 2002

- Locally testable codes
  - A new definition
  - Existential results
  - Impossibility results
- Decoding more errors
  - Beyond the list-decoding barrier?
  - Random errors
- Award: Sprowl Award - Guruswami Thesis
Research Plan for the Next Six Months

- Pending issues:
  - More efficient algorithms for list-decoding
  - Watermarking applications
  - Tree Codes

- New issues:
  - Constructions of locally testable codes.
  - Asymptotically good locally testable codes?