

Work

- Cofounder of SmarterGrades 2011-present
- Designed the backend of www.smartergrades.com, a website targeting Indian students that generates math questions, gives them to students, corrects them, and gives personalized, interactive explanations
 - Designed the current iteration of the front end as well
 - Conceptualized and created javascript apps to make questions more interactive (e.g. www.smartergrades.com/draw)
 - Completed question generators for the 6th grade curriculum
 - Currently doing trials with 2 schools in Delhi, India (Vasant Valley and Vidya Niketan)
- Student Network Assistant for Oberlin College 2010-2011
- Wrote and updated perl scripts for automating tasks previously done by hand
 - Set up and maintained network diagnostic tools such as flowtools and NDT
 - Installed, configured, and maintained ipv6 network software such as DHCP, snmptrap, and syslog-ng
- Intern at Rapleaf Summer 2010
- Designed and implemented a generic web crawler for directory sites, which inferred relationships within the web page based on proximity
 - Created map reduce jobs for processing and generating statistics on Big Data
- Intern for Professor Ben Kuperman Summer 2009
- Worked on Audlib, a security program that generates audit data by intercepting and recording C library function calls on all ELF executables
 - Performed benchmarks and performance tests pitting audlib against auditd, which intercepts system calls to do the same
- Tutor at Oberlin College Summer 2008-2010
- Had 2 discrete math tutees, and 2 introductory computer science tutees

School

- Oberlin College 2007-2011
- B.A. with high honors in Computer Science
- Select Coursework
- Honors project: a spread spectrum audio watermark encoder and decoder (c)
 - Various AI algorithms: bayes networks, backpropagation on neural networks, decision trees, minimax search (java)
 - All major data structures (java)

Play

- Small Personal Projects
- Scraper for google finance historical data (bash/ruby)
 - Music library organizer: uses mp3 and mp4 metadata to organize songs (bash)
 - Linear Program Solver: uses and demonstrates the simplex method and tableaus (C)
 - Note parser: creates electronic flash cards from notes, presents them, and records performance per flash card (java)
- Competitive programming 2008-2011
- Participated in the ACP-ICPC Regionals and Denison Spring Programming Competition 3 times each

Skills

Languages

Ruby
Javascript
Haskell
Scheme
C
Java
Perl

Tools

Vim
Unix
Jquery
Rails
Cascading
Git
Subversion

- In order of preference.
- Width of bar indicates proficiency.