A L E X A N D E R F I S C H E R

Oak Hall, UMass 143 Commonwealth Avenue, Room 319 Amherst, MA 01003-9253 (school) | afischer@umass.edu | http://alexfischer.me

Education

University of Massachusetts, Amherst, MA
2016–2020
- Double majoring in computer science and mathematics (concentration: pure math)
- GPA: 4.0

University of Colorado, Colorado Springs, CO
2014–2016
- Completed online mathematics classes while in high school
- GPA: 3.9

Franklin High School, Franklin, MA
2012–2016
- Graduated top 10 in class with a GPA of 3.9

Experience

Side Projects
- **Chamberwell**–Android game published on Google Play where one has to tilt the screen to move balls into the correct chambers
- **Mandelbrot set renderer**–renders images of the Mandelbrot set with smooth coloring and multithreading
- **Automata renderer**–renders Wolfram's elementary cellular automata and Conway's Game of Life
- **SPIRE autoenroller**–continuously checks if a class is open then automatically enrolls one in it
- **Franklin High School ID search**–website and chrome extension that allow Franklin High School students to search for their classmates' email addresses by name
- See personal website (http://alexfischer.me) for more detailed information on side projects

Hackathons
- **HackHolyoke 2016**–won best hardware hack for prototype of a bike lock that could be unlocked with a phone using Bluetooth low energy
- **HackUMass 2016**–used Leap Motion, a Raspberry Pi and servo motors to create a game where a physical maze is controlled by rotating one's hand to move a ball through the maze. Project was selected as one of Devpost's projects of the week and included in their newsletter

Undergraduate Teaching Assistant
Spring 2017
- Undergraduate TA for computer science class 'Programming with Data Structures'

Town of Franklin IT Department, Franklin, MA
2014–2016
- Set up computer systems in the new high school that was under construction (summer 2014)
- Continued to volunteer with Franklin High School's IT department thereafter

Skills
- Most familiar programming language is Java (including Android familiarity), but also familiar with HTML/CSS/JS and working knowledge of C and Python
- Most familiar with Linux, but also familiar with Windows and Mac OS X
- Familiar with Git and GitHub

Classes Taken/To Be Taken

Computer Science
- Introduction to Computer Science, via AP class in high school, Honors Programming with Data Structures
- Currently enrolled in Computer Systems Principles, Reasoning Under Uncertainty

Mathematics
- Calculus I, Calculus II, Statistics (via AP classes in high school), Multivariate Calculus, Linear Algebra, Differential Equations, Modern Analysis (at University of Colorado, Colorado Springs online during high school), Complex Variables
- Currently enrolled in Mathematical Cryptography, Discrete Structures