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) |
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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

- **Relevant Computer Science Coursework–**Computer Systems Principles (ongoing), Reasoning Under Uncertainty (ongoing), Honors Programming with Data Structures, Introduction to Computer Science
- **Relevant Mathematics Coursework–**Mathematical Cryptography (ongoing), Discrete Structures (ongoing), Statistics, Multivariable Calculus, Linear Algebra, Differential Equations, Modern Analysis, Complex Variables

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 if so
- **Franklin High School ID search**–website and chrome extension that allows 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
- Volunteered to set up computer systems in new high school while it was under construction (summer 2014)
- Continued to volunteer with Franklin High School's IT department thereafter

Skills

- **Programming Languages**–Java (including Android), HTML/CSS/Javascript, C
- **Technologies**–Linux/Unix, Git, Emacs