

Brittany Critchfield

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Education

Dartmouth College, Hanover, NH

Bachelor Of Arts: Major in Computer Science and Minor in Education

Class of 1955 Scholar, Great Issues Scholar, Sophomore Research Scholar

Jordan High School, Sandy, UT

Graduation Rank: Upper 5%, National Honor Society, Sterling Scholar Award in the Sciences, 3.9 GPA, 35 ACT

Relevant Coursework and Skills

Top Skills and Technologies: Javascript, Java, Python, HTML/CSS, C, React, Git, Swift

Coursework

- **Intro to Object Oriented Programming:** Intermediate programming course taught in Java with focus on data structures and algorithms. Projects included webcam editing program, language processor using Hidden Markov Models, and graph-based algorithm to detect distances in social networks.
- **Intro to Programming and Computation:** Intermediate programming course taught in Python. Projects included video games, encryption software, solar system simulation.
- **Bioinformatics:** Advanced course covering current bioinformatics software and algorithms taught in Python. Coursework included protein modeling and motif-searching.
- **Discrete Math in Computer Science:** Coursework in mathematical foundations of computer science, including an overview of discrete structures and graph theory.
- **Software Design and Implementation:** (in progress) Advanced programming course with focus on term-long project, focus on Linux and C technologies
- **Full Stack Web Development:** (in progress) Project-based course covering a variety of web technologies including HTML/CSS/Javascript, React, Redux, and Mongo

Experience

Kraemer Lab, Dartmouth College, Hanover, NH

iOS Developer

- Worked to develop new features and maintain educational app used for research purposes
- Project built in Swift language, will be deployed to App Store in upcoming months

Asian Association of Utah, Salt Lake City, UT

Math/Computer Science Teacher

- Implemented summer school curriculum for children aged 5-18
- Demonstrated significant improvement in math skills over a three month period for 90% of children taught.

Jane Hill Lab, Dartmouth College, Hanover, NH

Research Assistant

- Conducted experiments exploring interactions of *E. Coli* and *S. Aureus*, focusing on their interactions in a model cystic fibrosis patient's lung.
- Culminated experience by presenting work at Wetterhahn Symposium and completing a research paper.

Alpha Xi Delta, Dartmouth College, Hanover, NH

Programming Coordinator

- Coordinated events for approximately 100 people, upwards of 30 small events and 10 large events per term.
- Assisted in representing the organization to the campus and administration
- Collected and organized finances for events

Aegis (Dartmouth Yearbook), Dartmouth College, Hanover, NH

Graphic Design and Layout Editor

- Designed ~300 page yearbook for Dartmouth students and alumni
- Collaborated with layout team to create new overarching theme for yearbook

Department of Mathematics, Dartmouth College, Hanover, NH

Chemistry Tutor

- Developed curriculum to accommodate students' personal learning style
- Assessed student progress in order to revise learning schedule
- On average, increased student grade by one letter grade in a term