

DAVIS CARMICHAEL

Phone: 206.427.6419 E-mail: carmichael@chapman.edu Portfolio: <https://www.daus-s.dev>

EDUCATION

Chapman University, Fowler School of Engineering, Schmidt College of Science and Technology
Orange, CA

Bachelor of Science in Physics and Computer Science

December 2022

PROJECTS

Desmos Algebra

Developed a custom computer algebra system allowing users to input equations and generate solutions for all possible permutations. Utilized Rust, Haskell, and Shell Scripts, leveraging Dockerfiles for seamless deployment.

- Designed the algorithm for parsing mathematical syntax and generating permutations.
- Implemented the program in Rust and Haskell, ensuring robust functionality.
- Orchestrated deployment using Dockerfiles, streamlining accessibility for users.
- Significantly enhanced the efficiency of equation solving, providing a versatile tool for mathematical analysis.

Scheduling Website

Developed a full-stack web application to schedule physics tutoring sessions. Implemented with MongoDB, React on Netlify.

- Created an intuitive and accessible user experience using React
- Implemented user authentication with Google OAuth-2.
- Stored appointment data in MongoDB, while protecting users personal information.
- Implemented backend functionality using Netlify serverless functions.
- Built and deployed using Netlify CI/CD.

SKILLS

- Programming Languages: Java, JavaScript, C/C++, C#, Python, Rust, Haskell
- Database Technologies: DynamoDB, SQL, MongoDB
- Docker and System Programming
- Classical Mechanics, Thermodynamics, Quantum Mechanics, Optics; Laboratory and Theory
- Mathematical and Scientific Computing Methods of Analysis

EXPERIENCE

Costco Wholesale

Food Service Assistant

Tustin, CA

July 2023 – Present

Chapman University Tutoring and Learning Center

Supplemental Instructor

Orange, CA

August 2022 – December 2022

Evan's Creek Landscaping

Landscape Technician

Sammamish, WA

Summer 2019, Summer 2021

LEADERSHIP

Chapman's Cross Country/Track & Field Team Leadership Committee

July 2019 – May 2021

CHARACTERISTICS

- *Awards:* Washington State Honors Award, Highest Athletics Team GPA 4 years (Cross Country)
- *Traits:* Communication, Adaptability, Leadership, Collaboration