Luke Erling Fredrickson

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EDUCATION

University of Vermont // Burlington, VT

Degree Expected May 2022

• Bachelor of Science, Computer Science // UVM Honors College

GPA: 3.92

• Mathematics Minor & Statistics Minor // Dean's List: all semesters

Lakeside School // Seattle, WA

June 2018

TECHNICAL SKILLS

Programming Languages, Libraries, & Frameworks

Proficient: Java, JavaScript, HTML, CSS // Familiar: PHP, Python, SQL, R, C++, Express, Node.js, React & Redux, SCSS

Relevant Courses

TA: Data Structures & Algorithms // Advanced Programming in C++ // Web Development // Object Oriented Java

PROJECTS

Personal Website: <u>lukefredrickson.me</u> (for additional information)

Raspberry Pi Spotify LED Visualizer

- Coded a Raspberry Pi application which uses Spotify API data to visualize music on an LED strip in real time.
- Utilized Node.js, Express, and Socket.io to manage user authentication, data flow, and API queries.

The Rime of the Ancient Mariner Website

- Programmed a website to improve reading comprehension of the poem *The Rime of the Ancient Mariner* by employing narration, music, and color theme changes based on the poem's mood.
- Used JavaScript for synching themes with audio keyframes, and CSS with SCSS pre-processing for theming.

3D Game in Unreal Engine: Project Albatross

- Collaborated with two other students over five months to create a 3D open world game in Unreal Engine.
- Utilized Git for file management, and Agile & Scrum as a development methodology.

WORK EXPERIENCE

Honors College Peer Mentor // University of Vermont // Burlington, VT

Sept 2019 — Present

- Mentor a group of 18 first-year computing students in the UVM Honors College.
- Plan and organize residential life events for students in the UVM Honors College.

Junior Mechanic // Gregg's Greenlake Cycle // Seattle, WA

June 2019 — Aug 2019

Assembled new bicycles, ensuring proper safety and performance standards were met.

Freelance Construction and House Painting // Seattle, WA

Summer 2017 & 2018

• Developed construction and painting skills, critical safety skills, and detail-oriented work ethic.

LEADERSHIP & COMMUNITY INVOLVEMENT

Treasurer, UVM Bike Co-op // University of Vermont

Jan 2019 — Present

- Volunteer 5 hrs/week fixing bicycles for UVM students and faculty.
- Oversee club budget and facilitate purchases for shop supplies.
- Co-manage a team of 23 student volunteers.

UVM Cycling Team // University of Vermont

Sept 2018 — Present

Washington Trails Association (WTA) // Seattle, WA

Sept 2014 — June 2018

Volunteered 150+ hours maintaining hiking trails and presenting about WTA to groups of 30+ students.