# 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: 3.96

• Mathematics Minor & Statistics Minor

Lakeside School // Seattle, WA

June 2018

## **TECHNICAL SKILLS**

# **Programming Languages**

Proficient: Java, JavaScript, HTML, CSS // Familiar: PHP, Python, SQL, R, C++

**Development Tools** 

Libraries & Frameworks: Express, Node.js, React & Redux, SCSS, JavaFX // Tools: Git, Agile & Scrum

#### **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 bikes for UVM students and faculty.
- Oversee club funds and facilitate purchases for shop supplies.

### **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.