

Isabella (Bella) Laybourn

ilaybour@andrew.cmu.edu | (907) 738-4272

<https://www.linkedin.com/in/bellalaybourn>

EDUCATION

Carnegie Mellon University

Bachelor of Science in Computer Science, Intended Minor in Animation and Special Effects May 2023

Stanford Online High School

May 2019

RELEVANT EXPERIENCE

Biometric Shirt for Dravet Patient

2018 – Present

- Programmed biometric shirt using LEDs to monitor temperature and activity for a Dravet patient.
- Designed and fabricated working prototypes using Arduino, Adafruit, and Particle IoT boards.
- Currently testing a feature that writes the gathered temperature/activity information to a ThingSpeak channel.
- www.youtube.com/watch?v=DHsz5xJmUmk

Transitions and Effects for AMVs

2017 – Present

- Programmed 2D video effects and transitions for use in Anime Music Videos (AMVs).
- <https://github.com/saphirasnow/EffectsTransitions>

Wired Wolves Robotics Club

Fall 2017 – Spring 2019

Leader/Programmer

- Leader and sole programmer for the Wired Wolves in the 2017-18 and 2018-19 First Tech Challenge robotics competitions (Alaska State Control Award in 2019).
- https://github.com/saphirasnow/WiredWolves_FTC_Code

EvaluLogic

July 2019 – August 2019

Data Analysis Intern

- Analyzed and designed over 100 Excel graphs sorting and depicting information from 2 surveys of high school students regarding usage of and attitudes toward controlled substances (alcohol, tobacco, marijuana, prescription drugs).
- Formal presentation of the data to client Sitka Counseling at monthly meeting.

Girls Can Code Club

September 2016 – May 2019

Leader

- Created and taught curricula related to Python and Unity
- Competed in Technovation (semifinalist in 2018) and mentored other participants

SKILLS

Programming Languages: Java, IoT Programming (Arduino, Particle), Python, C#, C++, HTML

Applications: Microsoft (Word, PowerPoint, Excel), Adobe (Premiere Pro, Photoshop), Collectorz (Music Collector), NetBeans, Android Studio

HONORS & AWARDS

Control Award for Alaska State FTC Competition

Spring 2019

U.S. Presidential Scholar Semifinalist

Spring 2019

Technovation Semifinalist

Spring 2018

Tora-Con AMV Competition Semifinalist

Spring 2018

OTHER EXPERIENCE

Raven Radio

October 2017 – August 2019

Volunteer Project Administrator

- Wrote population and use protocols for Scavenger (online database for cataloging music library) and Music Collector; populated over 2000 entries to Scavenger
- Trained other volunteers to populate and use the database

Sitka Fine Arts Camp

April 2018 – June 2019

Freelance Video Editor

- Edited and finalized production videos (Seussical, Oliver, One Acts 2018, and Peter Pan) for distribution and display on the Fine Arts Camp website using Adobe Premiere Pro.

Sitka Public Library

June 2016 – July 2018

Summer Volunteer Course Instructor

- Designed and taught week-long workshops in Scratch, MIT App Inventor, Web Development, and Video Editing

Kenwa Kai Karate of Sitka

July 2017 – July 2019

Substitute Instructor

- Taught classes when primary instructor was unavailable
- Acted as a resource and mentor to other students