

Isabella (Bella) Laybourn

www.andrew.cmu.edu/user/ilaybourn

EDUCATION

Carnegie Mellon University

Bachelor of Science in Computer Science

Intended Minors in Animation and Special Effects and Software Engineering

QPA 4.0

May 2023

Stanford Online High School

May 2019

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 temperature/activity data to a ThingSpeak channel
- www.youtube.com/watch?v=DHsz5xJmUmk

Game Creation Society

Fall 2019 – Present

- Programmed sports-themed fighting minigame Sporshmallow (www.gamecreation.org/games/game_bytes)

Transitions and Effects

2017 – Present

- Programmed 2D video effects and transitions, including a selection of feathered sweeps and a background-independent chroma key.
- <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).

EvalLogic

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.
- 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.

Raven Radio

2017 – 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 and trained volunteers

Sitka Public Library

2016 – 2018

Summer Volunteer Course Instructor

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

SKILLS

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

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

HONORS & AWARDS

Carnegie Mellon University School of Computer Science Dean's List

Fall 2019

U.S. Presidential Scholar Semifinalist

Spring 2019

National AP Scholar

Spring 2019

Tora-Con AMV Competition Semifinalist

Spring 2018