

Robert L. Burris

Computer Science Sophomore at the
University of Washington

Bellevue, Washington
☎ (425)-698-9106
✉ rolblburris@gmail.com
📄 rolblburris.com
🌐 rolblburris

Education

2019–2023 **Bachelor's of Science**, *University of Washington, Computer Science.*

Academic Achievements: University of Washington Dean's List: Fall 2019, Spring 2020

Activities and Societies: UW Algorithmic Trading Club, Husky Swim Club

Relevant Coursework

University of Washington Data Structures and Parallelism (Fall 2020), Hardware/Software Interface (Fall 2020), Intro to Object Oriented Programming I/II, First Year Accelerated Honors Calculus I/II/III, Differential Equations, Linear Algebra, Beginning Scientific Computing

Work Experience

August 2020 - **Undergraduate Researcher**, *Wang Lab for Computational Biology*, Seattle, Washington.

Present - Investigating prostate cancer through the construction of multi-omic biological networks and analysis via machine learning in Python.

August 2020 - **Undergraduate Researcher**, *University of Washington School of Medicine*, Seattle, Washington.

Present - Currently developing an app in Dart/Flutter that uses muscle contractions to play a game for nerve/muscle rehabilitation.
- Implemented level generation and cleaned up app UI for improved user experience.

Summer 2019 **Summer Programs Teaching Aide**, *Robinson Center for Young Scholars*, Seattle, Washington.

& Summer - Served as a teaching aide (TA) for the accelerated Algebra 2 class.

2020 - Helped answer student questions, teach new material, and managed communications with head programs staff.

Technical Projects

August 2020 **Personal Website**, *rolblburris.com*.

- Redesigned my personal website for improved accessibility and readability using React and TypeScript.
- Implemented a switch from server-side to client-side rendering using Next.js and also developed a responsive mobile view before deployment to my server through Docker.

August 2020 **Tenbot - Medical Scheduling Chatbot**, *Built at Hack'20 Hackathon*.

- Developed a Telegram chatbot that allows users to schedule medical appointments for the Hack'20 Hackathon.
- Implemented NLP for text extraction using Rasa and scheduling via the Google Calendar API (all in Python) in under 24 hours.

March 2020 - **Financial Derivatives Pricer**.

April 2020 - Created a stock options valuation program in Python that allows a client to input a stock and accurately compare the results of two common pricing models against the current value of the option.
- Implemented Black-Scholes and Binomial Pricing models and also devised a way to readily pull existing option contracts from Yahoo Finance.

March 2020 - **pydproc - Automated API Data Collection**, *pip install pydproc*.

April 2020 - Designed and coauthored a Python3 package (pydproc) that simplifies repeated data collection from an API using Python and YAML.
- Implemented a validation script that checks required API fields and desired client data, a filter script that removes extraneous data from API calls, and a way for a client to build their own YAML file via a command line interface.

Skills

Languages Python, Java, C++, JavaScript, Typescript, Node.js, Dart, MATLAB
Technologies Docker, React, Flutter, HTML/CSS, Git, Unix/Linux, LaTeX, Express, Next.js