# Robert L. Burris

## Computer Science Sophomore at the University of Washington

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#### Education

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

Academic Achievements: University of Washington Dean's List: Autumn 2019, Spring 2020, Autumn 2020 Activities and Societies: UW Algorithmic Trading Club, Husky Swim Club

#### Relevant Coursework

University of Systems Programming (In Progress), Data Structures and Parallelism, Hardware/Software Interface, Washington Intro to Object Oriented Programming I/II, First Year Accelerated Honors Calculus I/II/III, Differential Equations, Linear Algebra, Probability I

### Work Experience

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

Present - Investigating prostate cancer through the application and development of powerful statistical models that process RNA Sequencing data in R and Python.

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

October 2020 FaceNote - Facial Recognition App. Built at Dubhacks 2020.

- Developed a desktop app in Electron that uses facial recognition to identify users in a Zoom call.
- Implemented the MongoDB database for storing and retrieving identified faces through HTTP requests in Go.

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

- Redesigned my personal website for improved accessibility and readbility using React and TypeScript.
- Implemented a switch from server-side to client-side rendering using Next.is 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) with over 700 downloads 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, C++, Go, JavaScript, Typescript, Node.js, Dart, MATLAB

Technologies Docker, React, Flutter, HTML/CSS, Git, Unix/Linux, LaTeX, Express, Next.js