# Alex Shaw

804-252-5454 • alex.shaw7117@gmail.com • https://alexshaw777.github.io/\_ • https://www.linkedin.com/in/alex-shaw-579b391ba/

#### **EDUCATION**

## University of Richmond, VA

May 2023

Bachelor of Science in Computer Science with a Concentration in Data Science and Statistics,

**GPA 3.2** 

Minor in Business Administration

Relevant courses: Data Structures, Discrete Structure, Software Systems Development, Computer Organization, Algorithms, Linear Algebra, Design and Programming Languages

### Computer Skills and Languages

Java

C/C++

Python **RStudio** 

HTML/CSS

**JavaScript** 

**SQL** 

MIPS Assembly

Logisim Fortran

MATLAB

Ada

Lisp

Scheme

Smalltalk

#### **EXPERIENCE**

### Realtime Sports, Boston, MA (Remote)

August 2021 - January 2022

Marketing Intern

- Facilitated communication with diverse businesses to establish strategic partnerships with Realtime Sports.
- Implemented marketing strategies to enhance brand visibility and drive user acquisition for the Realtime app.
- Engaged in a comprehensive observation of front-end app development using React, gaining valuable insights into the
- Sustained the engagement of four individuals, enticing them to persistently partake in Realtime Sports wagering for a period exceeding three months subsequent to the promotional campaign.

## International Collegiate Programming Contest, Richmond, VA

February 2022 - February 2022

Contestant

- Fostered effective collaboration and communication with teammates during the 5-hour duration.
- Devised strategic roles and formulated relevant questions for teammates to fulfill their responsibilities effectively.
- Attained a notable position in the rankings upon the culmination of the contest, subsequently being bestowed with certificates of commendation for our achievements.

#### EL VRAJ Corp, Chesapeake, VA

April 2020 – June 2020

Intern, Accounting

- Verified a 5% increase in revenue by successfully resolving rejected claims.
- Provided guidance and consolation to the primary founders regarding the advanced functionalities of Microsoft Excel and
- Acquired proficiency in healthcare software applications such as Caretime and Zermed. Employed these applications with strategic precision to effectively resubmit claims that had not been duly remunerated in their entirety.

#### **PROJECTS** (Refer To https://Alexshaw777.Github.Io/)

## CPUs in Logisim and C++

- Wrote an Assembler in C++ that turns a file containing MIPS assembly into a file that contains hex-encoded machine code.
- Designed a processor in Logisim that processes the binary (hex) encoded instructions from the assembler.
  - Encapsulates the Register file, ALU, Instruction Memory, Program Counter, Data Memory and Control Head
- Added memory mapped I/O functionality in Logisim to processor through a central I/O bus and added keyboard and terminal functionality.

#### Intersection Simulation in C++

- 4 lane intersection coded (eastbound (EB), westbound (WB), northbound (NB), southbound (SB)) and 3 different types of vehicles implemented (cars, SUVs and delivery trucks).
- Traffic light controlled through random number generation.
- Simulation dependent on integer-valued clock for vehicle movement.
- Used test-driven development to code and develop the simulation.

## Website in HTML/CSS/JavaScript

- Designed two websites (personal portfolio and Computer Science Research prototype).
- Used principles and insights of Human Computer Interaction to help develop website flow and architecture.

### **LEADERSHIP & SKILLS**

### Spider Ventures (SV), University of Richmond, VA

April 2021 – April 2022

Upper-level Associate

- Shaped the beginning of SV through technology speakers and advertising.
- Formed a podcast discussing different sectors of technology like cybersecurity, AI, Quantum Computing and IT