

Derrell Downey Jr.

Washington Township, NJ, 07676 | derrell.downey@gmail.com | 201-546-4391

<https://derrelldowneyjr.com/> <https://github.com/DerrellDowney/> | <https://www.linkedin.com/in/derrell-downey-jr-a41046206/>

SKILLS

Programming Languages: Java, Python, Javascript, C, Swift, SQL

Technologies: Git, Github, mySQL, Node.js, Angular, React, Mathematica, Xcode, Microsoft Office, Wordpress

EDUCATION

Skidmore College, B.A. in Computer Science, 3.6 GPA, Expected Graduation: May 2025

Relevant Classes:

- Software Design (CS226), Data Structures (CS209), Programming Languages (CS230), Algorithms (CS 305), Computer Organization (CS 318), Computer Networks (CS 327), Mobile Computing (CS 328)

RELEVANT EXPERIENCE

Web Development Intern | EDTAC | JUL '23 – SEP '23

- Collaborated with a multidisciplinary team to enhance the online presence and functionality of the Eating Disorders Treatment Accountability Council's website, supporting the organization's mission to promote evidence-based treatments and accountability within the field of eating disorders.
- Developed and implemented new features, optimizing website responsiveness and user experience by incorporating modern web technologies such as JavaScript, PHP, HTML, CSS and Wordpress.
- Demonstrated a proactive and adaptable approach, readily learning new technologies and frameworks as needed to support the continuous improvement of the organization's online presence.

Peer Academic Coach | Skidmore College | SEP '22 – Present

- Provided one-on-one and group tutoring sessions to fellow students, offering support in Computer Science.
- Conducted workshops and study sessions to enhance academic skills and foster a culture of collaborative learning.
- Demonstrated a strong commitment to promoting academic success and student well-being.

Site Supervisor / Head Camp Counselor | Little Ivy Academy | JUN '23 – AUG '23

- Demonstrated exceptional leadership skills by effectively training, mentoring, and supervising a diverse team of counselors, ensuring their adherence to safety protocols, program guidelines, and behavioral management strategies.
- Monitored and evaluated camp activities and staff performance, regularly providing constructive feedback and recognition, resulting in staff development and improved overall camp experience.
- Developed and implemented innovative camp activities and programs, tailoring them to the unique needs and interests of campers, resulting in high levels of participation and camper satisfaction.

NOTABLE PROJECTS

School Admin Software | Java, SQL

- Developed software utilizing a mySQL database to store the information of students, teachers, and administration
- Programmed GUI and back-end using Java and mySQL
- Implemented a login window connecting to the database to verify user type

Album Price Checker | Javascript, React

- Employed JavaScript to fetch data from multiple external APIs, including music database APIs, for retrieving album information and pricing details
- Devised a price tracking algorithm to monitor and notify users of price drops or discounts for their selected albums
- Utilized Firebase as a backend database for storing client's favorite albums

Skidnet | Java

- Implemented a Simple Reliable Transport, emulating a TCP connection between client and Server protocols
- Constructed a Simple Network Protocol facilitating message exchange across applications, including the setup and teardown of the transport layer, resembling the classic Go-Back-N protocol
- Executed data exchange on the network layer using a routing table with a link-state algorithm

B-Minor Compiler | C

- Designed and implemented the lexical analyzer, efficiently tokenizing the input source code and managing various language constructs
- Executed various semantic checks, including type checking, scoping, and symbol table management
- Utilized industry-standard tools and technologies, such as Lex and Bison, to streamline the development process and improve the compiler's maintainability