# Derrell Downey Jr.

**Washington Township, NJ, 07676 | derrell.downey@gmail.com | 201-546-4391**
**https://derrelldowneyjr.com/ | https://github.com/ddowneyjr/ | https://www.linkedin.com/in/derrell-downey-jr**

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## 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