Rachel Mary McCoy

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In process of TS Clearance

EDUCATION

James Madison University, Harrisonburg VA   **Expected Graduation May 2025**

Bachelor of Science, Computer Science and minor in entrepreneurship and mathematics
Harrisonburg, VA

SKILLS, PROJECTS & INTERESTS

- **Programming Languages: Java, Python, C, Ruby, Haskell, HTML, JavaScript Tools: GitHub, SQL, AWS, Salesforce CRM, Scrum**

- **Past Coursework: Programming (Java), Data Structures & Algorithms (Java), Software Engineering (Java), Web Development (HTML/JavaScript), Computer Systems (C), Programming Languages (Ruby/Haskell), Numerical Systems (Python)**

- **Current Coursework: Applied Algorithms (Python), Interaction Design, Compilers (Decaf), Hacking for Defense**

- **Selected Personal Projects:**   **Rachelmcco.github.io**
  - **ForScore Dive Scoring Application (Java):** Developed an application in Java designed to calculate diving scores for a dive meet. This project also featured a Graphical User Interface (GUI) component, allowing users to input a specified number of dives and calculate the total score for the entire dive meet.
  - **Shell & DHCP Protocol Simulation (C):** Built a custom command-line shell supporting external programs, built-in commands, environment variables, and process piping. Developed a DHCP client-server simulation, interpreting BOOTP/DHCP messages and handling IP assignment Complex
  - **Number Calculator (Java):** Collaborated on a team project to create a Complex Number Calculator with a Java-based GUI and its corresponding mathematical functions.

WORK EXPERIENCE, EXTRACURRICULAR ACTIVITIES, AND COMMUNITY SERVICE

RISE Women's Leadership Academy Participant   **October 2025 - Present**
James Madison University   *Harrisonburg, VA*
- Selected as one of 16 female student-athletes to participate in the inaugural cohort. Engaged in leadership development and community-building workshops. Collaborated on a cohort-led women's empowerment project.

Technology Intern   **June 2024 - August 2024**
Ben Lewis Plumbing   *Annapolis Junction, MD*
- Facilitated Salesforce CRM integration and led a website redesign to enhance user experience. Gained insights into corporate operations and interdepartmental workflows.

Software Engineering Intern   **June 2023 - August 2023**
Praxis Engineering   *Annapolis Junction, MD*
- Worked on data science and reverse engineering projects, utilizing Python to analyze large datasets and develop predictive models. Presented a Python-based GUI, winning the Best Technical Award at the SIPS Internship Conference.

CS Teaching Assistant   **December 2023 - Present**
James Madison University   *Harrisonburg, VA*
- Facilitated an inclusive learning environment and served as a role model for undergraduate students.

NCAA Division I Athlete   **August 2021 – Present**
James Madison University   *Harrisonburg, VA*

- Balanced 20+ hours of weekly training with academic responsibilities as a Division I Swimmer.

Community Service

| Adopt a Road Cleanup | Mount Airy Volunteer Fire Company Carnival | Maryland Food Bank |

Planning on pursuing the accelerated Master of Engineering at the Virginia Tech College of Engineering June 2025