

Adria Retter

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Master of Software Engineering candidate seeking professional opportunity. Interested in motivation/learning with a passion for user experience and accessibility. Curious and eager learner, record of achievement in research, leadership, and athletics.

EDUCATION

Master of Science (M.S.) – Software Engineering

Anticipated May 2025

Villanova University (Villanova, PA)

- Registered Coursework: Database Systems, Design and Analysis of Algorithms, Cloud Native App Design & Development

Bachelor of Arts (B.A.) - Computer Science, Mathematics

May 2023

Swarthmore College (Swarthmore, PA)

- Relevant Coursework: Data Structures & Algorithms, Computer Systems, Computer Networks, Security & Privacy, Artificial Intelligence, Machine Learning, Theory of Computation

PROGRAMMING SKILLS

Languages: C, C#, C++, CSS, HTML, JavaScript, LaTeX, Python, SQL

Technologies/Frameworks: Agile Scrum, APIs, AWS, D3.js Excel, Git, Jupyter Notebook, Linux, NumPy, Pandas, PyTorch, React.js, Redux, scikit-learn, Tensorflow

EXPERIENCE

Lead Fellow (Swarthmore College Writing Program)

Sep 2020 - May 2023

- Performed data analytics on usage patterns and implemented programmatic changes, increasing student attendance by 38%.
- Provided technical guidance to 15 new associates and 100+ students.

Student Researcher (Swarthmore College Math Department)

May 2021 – Sep 2022

- Completed two 400-hour summer research projects (Knot Theory, Graph Theory).
- Improved technical writing skills by carefully documenting proofs.
- Used critical thinking, consulted relevant literature, and collaborated with professors to find groundbreaking solutions.

PROJECTS

Personal Website (CSS, HTML, JavaScript, ReactJS)

Present

- Building personal website to expand front-end development skills and highlight project work.

Spotify Song Genre Classifier (C, C++, Python, Tex)

May 2023

- Incorporated stochastic gradient regression, SVM, and random forest to develop the classifier.
- Utilized detail-oriented approach to perform unit testing, debugging, and determine frequency of correct classification.
- Extended project to include naïve recommender system, which received 93% user satisfaction.

Genetic Algorithm for Conway's Game of Life (Jupyter Notebook, Python, TeX)

Nov 2022

- Developed a Genetic Algorithm which found optimal start states for Conway's Game of Life.
- Animated the game board to visualize spatial migration patterns.
- Assured quality by comparing results with proven best cases.
- Found 100% of proven optimal start states for boards up to 15x15.

AWARDS/CERTIFICATIONS

JavaScript Algorithms and Data Structures Certification (FreeCodeCamp)

Dec 2023

Responsive Web Design Certification (FreeCodeCamp)

Nov 2023

National Champion, Discus Throw (NCAA)

May 2023

Gladys Irish Award (Swarthmore College)

May 2023

“This award is presented to the junior or senior woman who, through her commitment, dedication and the pure enjoyment of her sport, has achieved the highest degree of excellence.”