Adria Retter

Villanova, PA, 19085 | +12155277395
Email: aretter@villanova.edu
LinkedIn: linkedin.com/in/adria-retter | **Personal Website**: aretter329.github.io

EDUCATION

Bachelor of Arts (B.A.) - Computer Science, Mathematics Sep 2019 - May 2023

Swarthmore College, Swarthmore, PA

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

Master of Science (M.S.) – Software Engineering Sep 2023 – Present

Villanova University, Villanova, PA

EXPERIENCE

Private Tutor (Self-Employed) Sep 2019 - Present

Math, writing, and test-prep tutor (SAT/ACT) for grades 5-12. I manage bookings, advertising, and billing for my personal tutoring business. On average, my caseload is 5-6 students.

Lead Fellow (Swarthmore College Writing Program) Sep 2020 - May 2023

Developed curriculum, ran training, hosted classroom workshops. Co-authored year-end report, which analyzed Writing Center usage data and made suggestions for systemic improvement.

PROJECTS

Personal Website Nov 2023 - Present

Building personal website to feature my projects, resume, and hobbies (HTML/CSS, JavaScript).

Genre Classifier Apr 2023 - May 2023

Built and compared performance of stochastic gradient regression, support vector machine, and random forest algorithms to classify Spotify songs (Python, Jupyter Notebook, scikit-learn).

Throttling Number of Graphs (Graph Theory) May 2022 - Sep 2022

400-hour research project completed with my professor and 2 peers, funded by Swarthmore Math Department. Proved and tabulated the throttling number for states of the game “Cops & Robbers.”

Genetic Algorithm Nov 2022 – Dec 2022

Developed GA to find optimal states for Conway’s Game of Life (Python, C, TeX). Findings corroborated with proven “ideal” start states for the game.

Rhombille Tiling Number up to c(K) = 7 (Knot Theory) May 2021 - Sep 2021

400-hour independent research project completed with my professor and funded by Swarthmore Math Department. Proved and tabulated the rhombille tiling number for mathematical knots up to 7-crossings.

SKILLS

Python, C++, C, SQL, NoSQL, Java, HTML/CSS, JavaScript, Git, Github, Jupyter, OOP, LaTeX