



EDUCATION

Temple University, Philadelphia, PA

Haverford College, Haverford, PA

GPA: 3.579/4.00

Senior Thesis: *Reducing Human Oversight in Robotic Learning: Predicate-Based Approaches with Generative Language Models*

Awards & Honors: QuestBridge Scholar, John P. Chesick Scholar, NYU Film Scoring Scholarship Recipient, LAIW Grant Recipient

M.M., Music Composition (Expected 2027)

Bachelor of Science, Computer Science & Music

SKILLS

Languages: Spanish (Native Speaker)

Programming Languages & Scripting: Python, Java, R, C++, Visual Basic, C#

ML/AI: PyTorch; Deep Q-Networks/Reinforcement Learning, Hidden Markov Models; Ablation studies, evaluation, & experiment design

Genomics: Ensembl/DPGP2, preprocessing, pop-size inference

Web Development: JavaScript, React, Node.js, HTML/CSS, Firebase, Django, Chart.js

Tools & Frameworks: Docker, Streamlit, SPARQL, Markdown, JavaFX, Tkinter

Data Analysis and Automation: SQL, Web Scraping (BeautifulSoup, Selenium), Matplotlib, Scikit-Learn, Seaborn, Microsoft Report Builder

RELEVANT WORK EXPERIENCE

Software Developer Intern, *Leidos; Electronic Dental Records Admin Tool*, Houston, TX (Remote)

July 2024 – May 2025

- Developed Python quality gates and pre-deploy checks that reduced production defects before deployment to the live site
- Conducted load testing to evaluate system performance and reliability under various conditions
- Automated data collection via web-scraping tools to speed analysis

Full Stack Developer, Automation Engineer, & Data Analyst, *Wade Clark Mulcahy*, Philadelphia, PA

October 2023 – September 2024

- Redesigned the firm site → ~40% traffic lift and improved engagement
- Wrote Visual Basic scripts for bulk data migration; cut manual entry hours to near-zero
- Authored SQL for ProLaw (Live/Test) + Report Builder; delivered decision-driving reports
- Automated data entry for 10,000+ case matters overnight without business disruption

Software Developer, *CRIM Project @ Haverford College*, Haverford, PA

January 2023 – September 2024

- Maintained the PyPI package crim-intervals: added quality gates and aided in CI/CD
- Ported Digital DuChemin (Py2→Py3; Django 1→4), and updated rendering and backend libraries
- Researched and developed new data rendering functions for advanced music data analytics; wrote Markdown docs
- Developed a SPARQL query streamlit widget for the Carnegie Hall Data Lab team
- Mentored and onboarded my successor, creating handoff docs and code walkthroughs to ensure continuity

RELEVANT PROJECTS

Computational Biology – Hidden Markov Model Population Trends (*Drosophila melanogaster* & *Arabidopsis thaliana*)

Deep Reinforcement Learning for Snake — Deep Q-Network generalization across obstacle complexity

Workout Logger App – Dynamic Workout Logging and Analysis Tool

Intervals Highlighter React Visualization Tool for Musicological Analysis for Citations: The Renaissance Imitation Mass (CRIM) Project

Flight Reservation System

HIGHER-EDUCATION TEACHING & ADVISING EXPERIENCE

Graduate Teaching Assistantship, *Aural Theory I at Temple University*, Philadelphia, PA

August 2025 – Present

Teaching Assistant, *Data Science Course at Haverford College*, Haverford, PA

August 2024 – May 2025

Advising Intern, *Center for Career and Professional Advising*, Haverford College, Haverford, PA

August 2022 – May 2025

Teaching Assistant, *Encoding Music Course at Haverford College*, Haverford, PA

August 2023 – September 2024

OTHER EXPERIENCE

Summer Percussion Instructor, *Waltrip High School*, Houston, TX

July 2022 – August 2025

Tutor, *A Better Chance Lower Merion*, Ardmore, PA

January 2023 – September 2024

Event Programming Intern, *Center for Career and Professional Advising*, Haverford College, Haverford, PA

October 2021 – May 2022

Summer Percussion Instructor, *Elsik High School*, Houston, TX

May 2021 – July 2022

