Steven Chiacchira

Education

Master's Degree in Computer Science

May 2025

• Master's degree from Miami University

4.0 GPA | summa cum laude

• Bachelor's degree from Miami University

- 4.0 GPA | summa cum laude
- Minor in mathematics. 2 years of Mandarin and chemical engineering study

Professional Experience

Data Science Intern at Textron Aviation

Summer 2024

- Applied Bayesian statistical analysis to analyze factors contributing to aircraft sales
- Deployed and maintained Azure-hosed data products. Implemented data governance policies
- Implemented data pipelines using Azure Data Factory for analysis of aircraft data
- Proposed and led Apache Spark deployment to analyze aircraft sensor data using Docker on Linux
- Proposed and implemented a Docker-based solution for distributed containerization on Linux
- Advised veteran engineers on the internals of Docker, wrote detailed deployment documentation

Machine Learning Intern at ACT Inc.

Summer 2023

- Applied NLP techniques to candidate reading passages, reducing manual costs by 50%
- Completely eliminated server costs by implementing a distributed database using Git and Python
- Developed web scraping tools to automatically source data from news websites

Supplemental Instruction Leader at Miami University of Ohio

2021 - 2022

• Developed and presented curriculum to hundreds of concurrent students

Projects and Skills

- Machine Learning, Leadership: Led a team monitoring deforestation in the Amazon rainforest
- PyTorch, Sklearn, Skimage: Designed and trained skeletonization model for identifying roads
- SQL, C++, OpenMP: Implemented a lightweight, multithreaded SQL language parser and server
- Git, Linux, Docker: Built a makefile-based system for deploying personal tool configurations
- Python, Web APIs, YAML: Built a Discord dice bot supporting unique mechanics for RPG nights
- Mathematics, Problem Solving: Placing member of Miami University's Putnam Competition team
- Collaboration, Agile Methodology: Certified ICAgile professional
- Experience with linear algebra, optimization, probability theory, and statistical methods
- Licensed ham radio operator. Callsign KF8-CAL
- Active yet struggling participant in Miami University's Ballroom Dance club

Research Experience

Software Architect at Miami University's Laboratory of AI Security Research

2024 - 2025

- Published COMPSAC paper on a novel Python framework for mutating Keras autoencoders
- Published framework collating attack and defense algorithms for image models to PyPI
- Devised probabilistic immunization techniques for defending against deepfake-style attacks
- Implemented novel adversarial training algorithms based on distribution and information theory
- Documented code using Sphinx. Implemented PyTest unit tests. Used PyDebugger extensively
- Managed lab's computational resources, conda environments, and GitHub CI/CD integrations

Honors and Awards

Miami University President's List Licking County's recipient of Miami University Governor's Scholarship National Merit Scholar 2020-2025

2020-2024

2020