Steven Chiacchira

✉ schiacchira@gmail.com 🔗 LinkedIn GitHub 🌐 Website

Education

Master's Degree in Computer Science   **Spring 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

ML Engineer | Laboratory of AI Security Research   **2022 - 2025**
- Led laboratory artificial intelligence and computer vision projects. Mentored new engineers
- 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 algorithms for defending against deepfake-style attacks
- Implemented novel adversarial training algorithms based on distribution and information theory
- Designed and maintained build systems, documentation, and GitHub CI/CD integrations

Data Science Intern | Textron Aviation   **Summer 2024**
- Led team Bayesian statistical inquiry quantifying factors contributing to aircraft sales
- Presented team findings to upper management, regularly communicated expectations
- Deployed and maintained Azure-hosted 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
- Advised veteran engineers on the internals of Docker, wrote detailed deployment documentation

Machine Learning Intern | ACT Inc.   **Summer 2023**
- Applied NLP techniques to candidate reading passages, reducing manual costs by 50%
- Designed graphical UI system for use by nontechnical employees over multiple sprints
- Completely eliminated server costs by implementing a distributed database using Git and Python
- Developed web scraping tools to automatically source data from news websites

Projects and Skills

- **Deep Neural Networks**: Designed deep skeletonization model for identifying roads from satellites
- **Machine Learning, Leadership**: Led team monitoring deforestation in the Amazon rainforest
- **Reinforcement Learning**: Trained neural network to play videogame from live pixel data
- **Python, Web APIs, YAML**: Built a Discord dice bot supporting unique mechanics for RPG nights
- **Linux, Docker, Git**: Built a makefile-based system for deploying configurations to Linux systems
- **SQL, C++, Multithreading**: Implemented multithreaded SQL language parser and server
- **Rust, Technical Writing**: Proposed and implemented novel encryption scheme using automata
- **C#.NET, MAUI, UX**: Designed and built recipe planning app with C# MAUI
- **Javascript, CSS, Docker**: Led team to design multiplayer online game with ExpressJS and Docker
- **Mathematics, Problem Solving**: Placing member of Miami University's Putnam Competition team
- **Collaboration, Agile Methodology**: Certified ICAgile professional
- **Public Speaking**: Developed and presented curriculum to hundreds of concurrent students
- Experience with linear algebra, optimization, probability theory, and statistical methods
- Licensed ham radio operator. Callsign KF8‑CAL

Honors and Awards

Miami University President's List   **2020-2025**
Licking County's recipient of Miami University Governor's Scholarship   **2020-2024**
National Merit Scholar   **2020**