Alessandro Ferrari

+1 (646) 821 5621• Atlanta, GA - New York, NY • alessandroferrari@gatech.edu • US Person (Green Card)
linkedin.com/in/alessandroferrari04 • alessandroferrari.live • github.com/Ferryistaken

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY, College of Computing, College of Biological Sciences **Atlanta, GA**
Bachelor of Science in Computer Science, Minor in Biology *May 2026*
- **Concentration**: Intelligence, Systems & Architecture, *Dean's List* **GPA:** 3.93

EXPERIENCE

BigHat Biosciences (8VC) **San Mateo, CA**
Lab Automation Software Intern *May 2025 - August 2025*
BigHat designs antibody therapies using a combination of ML guided design and high-throughput autonomous labs.
- Programmed autonomous experiments for the fleet of autonomous robots, integrating tightly with our in-house LIMS
- Designed and deployed a distributed logging and metric ingestion system to gain observability over the robots with the CTO
- Developed fleet management solutions to enable CI/CD based deployment and rollback of the fleet's software in seconds
- Explored business costs of migrating the fleet to a new framework to reduce technical debt, presenting results to CEO

Maverick Metals (YC S22) **San Antonio, TX**
Machine Learning Engineer Intern *May 2024 - August 2024*
Maverick manufactures enzymes that mine metals, clean oil, and perform a variety of commercial tasks.
- Managed a ML team leading 4 engineers through months of iteration culminating in a no-code protein design suite
- Developed generative protein design system combining distributed HPC and ML for protein fitness landscape exploration
- Worked directly with CEO in daily meetings to align the company's vision with its technology, focusing on generating value
- Contributed code to SOTA protein engineering models METL (Gitter Lab, UW Madison) and FragFold (Wei-Li, MIT)

Biocentis **Milan, Italy**
Software Engineer Intern *May 2023 - August 2023*
Biocentis is an agrotech company that leverages genetic engineering for vector pest control.
- Developed a GPU Agent Based Model to represent the Drosophila Suzukii from the Genotype to Swarm flight pattern
- Leveraged GPU C++ algorithms to cut down simulation time from 8 hours (CPU + Python) to 3 minutes (GPU + C++)
- Worked on GPU/CPU interoperability and developed a low level cross language simulation algorithm
- Led biology-informed project from brainstorm to deployment, informing non-technical stakeholders of engineering choices

Egicon S.r.l. **New York, NY**
Embedded Firmware Developer Intern *June 2021 - July 2021*
Egicon S.r.l. designs and produces "Plug & Play" electronic solutions for high-performance systems.
- Developed bare metal C++ software for custom ARM-based single board computer to power motorcycle cockpit diagnostics
- Shipped embedded firmware to production circuit, which was printed and deployed on the field 10'000+ times

RESEARCH

Gibson Lab @ Georgia Institute of Technology - *Preprint on Biorxiv. doi:10.1101/2025.07.25.666784* **Atlanta, GA**
snATAC-Express infers Gene Expression from Prioritized Chromatin Accessibility Peaks using Machine Learning
- Developed and deployed biologically informed scRNA/scATAC pipelines to ensure replicable analysis
- Implemented and trained SOTA ML models, focusing on explainability and reproducibility of scientific results

LEADERSHIP

Georgia Tech Bioinformatics Club **Atlanta, GA**
President *Jan 2023 - Present*
- Present to 50+ club attendees ranging from undergrad to PhD in weekly meetings on various bioinformatics topics
- Work with exec team and various companies, labs, faculty, and leading biotech voices to organize club talks

SKILLS/INTERESTS

Technologies: Python, Java, C/C++, Rust, R, Typescript, React, Tensorflow, Jupyter, Git, AWS, Linux, Docker, Vertical Integration
Awards: 8VC Engineering Fellow 2025, First Place in the RomeCup robotics competition in 2015, Second place in 2014
Languages: Italian - Native, English - Native, French - Basic, Latin - Basic