

Alessandro Ferrari

+1 (646) 821 5621 • Atlanta, GA - New York, NY • alessandroferrari@gatech.edu • US Permanent Resident (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 2025

- **Concentration:** Intelligence, Modeling & Simulation
- *Dean's List*

GPA: 4.0

EXPERIENCE

Biocentis

Milan, Italy

Software Engineer - Bioinformatics

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++)
- Conducted daily and monthly meetings to update the international team about project's updates

Egicon S.r.l.

New York, NY - Modena, Italy

Firmware Developer

June 2021 - July 2021

Egicon S.r.l. designs and produces "Plug & Play" electronic solutions for high-performance systems.

- Developed bare metal software in C++ for custom hardware used in product testing
- Synced with remote team to make revisions based on senior developer feedback and prepared circuit for production
- Employed industry standard technology stacks to ensure longevity of product while having complete control over direction of the project

WestSideEats

New York, NY

Software Engineer

Sept 2021 - Jun 2022

WSE is a New York based nonprofit startup specializing in food deliveries.

- Leveraged agile software development in a team to present a product using technologies like React, AWS and Square
- Developed internal tools in ReactJS to decrease development time and enabled outsourcing of menus to clients
- Utilized industry standard tools like git and Jira to sync with the team

Rocky Linux

New York, NY

Software Quality Analyst

August 2021 - October 2021

Rocky Linux is the successor of CentOS, after it was bought and terminated by IBM.

- Synced up with a team from around the world to bring together a free, enterprise-grade operating system
- Worked with a team of 20 people turned into a community of thousands through directional weekly meetings
- Used industry standard tools like Bugzilla and Mattermost to track progress and communicate with team

RESEARCH

Gibson Lab @ Georgia Institute of Technology

Atlanta, GA

Single cell transcriptomics for Gene Expression prediction

June 2023 - Present

- Prepared human blood immune system data to use as control during transcriptomic modeling and analysis
- Established a pipeline that turns raw scATAC and scRNA reads into aligned, quality-controlled, analysis ready data
- Performed Machine Learning and statistical analysis on human PBMC data and reported results in weekly meetings
- Developed a framework that automates testing large numbers of clustering algorithms to determine best performing

SKILLS/INTERESTS

Technologies: Python, Java, C, C++, Rust, R, Javascript, HTML, CSS, Typescript, React, Tensorflow, Jupyter, Git, JIRA, AWS, Linux

Affiliations: VP of Content Direction @ Bioinformatics Club, Human Genomics Journal Club, Grand Challenges

Awards: First Place in the RomeCup robotics competition in 2015, Second place in 2014

Languages: Italian - native, English - C1, French - Basic, Latin - Proficient

Volunteering: New York City Common Pantry 2019-2022, Trees Atlanta 2023