# **Michael Mironidis**







New York University

New York, NY

BA Computer Science and Mathematics (cum laude)

2018 - 2022

- > Notable coursework: Artificial Intelligence, Applied Internet Technology, Numerical Analysis, Mathematics of Finance
- > President, VP, Treasurer of NYU's Hellenic Heritage Association

## **Experience**

AT&T Middletown, NJ

Senior Software Engineer

April 2023 - Present

- > As part of the Innovation team, develop new features into IVR (Interactive Voice Response) framework (Java, Spring, Groovy, bpmn), such as thread-safe Kafka consumer hot-swapping, scheduling customer callback with agent availability, and integrating a LLM (Large Language Model) to handle unidentified customer intents.
- > Continue development of below ML application, leading team of four juniors in implementing long-term system design and developing new model use cases
- ➤ Lead proof-of-concept Rust backend microservice development (Axum) and cloud deployment, developing extensible, reusable Rust code for continued Rust development.

Software Engineer I-II (Technology Development Program)

July 2022 – April 2023

- > Designed and led development of internal Machine-Learning web application (Python, Pandas, Kafka, FastAPI, Cassandra, Azure) for identifying invalid call failures and their cause in real-time, allowing calls to be classified near-instantly with 99% accuracy.
- > Implemented Kafka Consumer into IVR framework for customer authentication through mobile app while on call with customer support
- ➤ Designed cloud infrastructure and developed CI/CD pipelines using Azure DevOps and Terraform for secure deployment of applications within the organization
- > Served as a lead SE technical interviewer for the '22-'23 hiring season

#### Columbia University's Center for Precision Medicine and Genomics

New York, NY Summer 2021

Software Development / Bioinformatics Intern

- > Independently developed ArisLIMS for the Gharavi lab, a full-stack web-based Laboratory Information and Management System, saving 5+ days of time per month versus the legacy system as estimated by the project coordinator. Worked closely with lab staff to translate their needs into code, ultimately saving the lab \$50,000 versus yearly subscription-based platform in consideration.
- > Stack: Python, Flask, MySQL

## Projects

**Game Development with Rust** Using Rust with Bevy, I began a blog following my work implementing features not yet widely available in the Rust gamedev ecosystem, such as grass with wind simulation

**Wave-function Collapse Terrain Generator** App for drawing realistic 2D terrains on a grid using wfc, and then navigating that grid using A\* (Python, PyGame)

**iOS app** Novelty iOS app involving timer and leaderboards (Swift, MongoDB Atlas)

**AIT Final Project** Node.js Social media app for organizing meetups with friends, complete with Azure Active Directory authentication, friend search/add, and Outlook calendar sharing

Quant Strats Finance app for calculating common quantitative investment strategies on custom portfolios. Flask + SQL

## Skills

Languages Python, Java, Rust, Groovy, Javascript, HTML+CSS, Swift, C, SQL

**Libraries/Tools** FastAPI, Flask, Spring, Pandas, Scikit, Kafka, Cassandra, maven, git, Axum, terraform, bpmn, SQL and NoSQL databases, Node.js, React, DialogFlow

**Concepts** RESTful APIs, Backend, asynchronous design, OOP, functional programming, data engineering, debugging, DRY, AI/ML (Theory + Ops), unit testing (JUnit, unittest), Multithreading/multiprocessing, system design, Agile (scrum)

Fun Fact Won the John Lennon Songwriting Contest in the genre of Country in 2021 🛎