# Jonathan Chen

github.com/04jono in linkedin.com/in/jonathanchenq 

# **EDUCATION**

**Cornell University** Aug 2022 — May 2025

Bachelor's in Computer Science | Double Minors in Business and Statistics

- Relevant Coursework: Machine Learning, Computer Systems Organization, Functional Programming, Honors Object-Oriented Programming and Data Structures
- Honors: US Presidential Scholars Program Candidate (2022), USA Computing Olympiad Gold Division (2021), National Merit Finalist (2021)
- Leadership and Extracurriculars: Technology Officer on Cornell Innovative Film and Tech, Android Developer for Cornell AppDev, Software Developer for Cornell CMSX Team, Big Red Marching Band

## **SKILLS**

Languages: Java, Python, OCaml, Kotlin, C, C++, JavaScript, HTML5, CSS3

Libraries and Frameworks: React, Node.is, JUnit, Flask, PyTorch, NumPy, Pandas, SQL

Tools and Software: Git, Gitlab CI/CD, Linux, Bash, Grafana, Docker, MongoDB, Android Studio, MySQL, Gradle

### **EXPERIENCE**

Teaching Assistant

#### **Cornell Department of Computer Science**

Aug 2023 — Present

Ithaca, NY

GPA: 4.15/4.0

- Serve as a course consultant for the class CS 3110, Data Structures and Functional Programming
  - Hold office hours, grade homework assignments, proctor exams, and assist with course administration

#### **Intellian Technologies**

May 2023 — Present

Software Engineer Intern

Rockville, MD

- Developed and deployed Python packages with Docker to create a data pipeline for collecting low-earth orbit satellite terminal data from both parabolic and flat-panel phased array antennas
- Implemented log aggregation systems and real-time monitoring dashboards using InfluxDB database, Flask, and Grafana to increase data logging throughput by 500% and reduce mean time to identify software issues by 65%
- Designed Gitlab CI/CD pipeline stages and developed smoke tests with Python and Gitlab Runner to continuously install and test new antenna software over SSH, reducing testing time by 20%
- Led a team of interns in prototyping a document management system using React, Flask, and MongoDB
- Actively collaborated with software and system integration teams following Agile/Scrum methodology

Mar 2023 — May 2023

iD Tech

• Taught private online lessons and tutoring sessions in Python, Java, and advanced math up to Calculus

#### **Pioneer Academics Research Program**

June 2021 — Sept 2021

Remote

Research Scholar Remote

• Designed a neural network machine learning model for analyzing website fingerprinting data on the internet

# **PROJECTS**

## Scooped

Instructor

Lead Android Developer

- Lead Android Developer for Scooped, a rideshare app that matches Cornell University students with carpools
- Implemented Android native user interfaces from high-fidelity Figma designs using Jetpack Compose toolkit
- Developed the app's MVVM architecture and RESTful API requests for user and ride details with Kotlin

# Simulating Evolving Artificial Life

- Developed the recursive descent parser and interpreter in Java for a unique "critter" programming language
- Architected simulation software with evolving "critter" programs through random mutations
- Led a team in designing and implementing a modern GUI with JavaFX components