

# Jonathan Chen

✉ [jonathanchenq@gmail.com](mailto:jonathanchenq@gmail.com)

🌐 [linkedin.com/in/jonathanchenq](https://linkedin.com/in/jonathanchenq)

🐙 [github.com/04jono](https://github.com/04jono)

📍 Ithaca, NY

## EDUCATION

---

### Cornell University

Aug 2022 — May 2026

Bachelor's in Computer Science, Minor in Statistics

**GPA:** 3.95/4.0

**Relevant Coursework:** Data Structures (Honors), Computer Systems, Robot Learning, Computer Networks, Machine Learning, Computer Vision, Analysis of Algorithms (Fall 2024), Database Systems (Fall 2024)

## EXPERIENCE

---

### Oracle

May 2024 — Present

Software Engineer Intern

*Austin, TX*

- Replaced costly manual data entry for onboarding new hotel chains with automated processes by designing CakePHP 4 RESTful API serving as a gateway for authentication and identity management services
- Developed integrations with cloud identity providers to authorize API calls between hotel software systems
- Actively collaborated with Identity and Guest Experience teams following Agile/Scrum methodology

### IBM

June 2024 — Present

Accelerate Program Research Track

*Remote*

- Attended workshops on AI and cloud research at IBM and developed machine learning models with Python

### Intellian Technologies

May 2023 — May 2024

Software Engineer Intern

*Rockville, MD*

- Led web application development of unit reservation system built with React, Flask, Docker, and MongoDB
- Developed and deployed Python packages for collecting performance metrics from satellite user terminal data
- Increased data throughput by 500% for a log aggregation system using InfluxDB database, Flask, and Grafana

### Cornell Department of Computer Science

Aug 2023 — May 2024

Course Instructor

*Ithaca, NY*

- Delivered lectures, held discussions, and planned office hours as instructor for CS 1998: Android Development
- Graded assignments and held office hours for CS 2110: Object-Oriented Programming and Data Structures

## PROJECTS

---

### Ithaca Transit

*Android mobile app for navigating using Ithaca's TCAT bus service*

- Led Android mobile application development for a route planning mobile app with Kotlin and Jetpack Compose
- Developed features for real-time bus location tracking using Google Maps API and GTFS data

### Deep Q-Learning Algorithm on Space Invaders

*Reinforcement learning agent trained in OpenAI Gym's Atari Environment*

- Preprocessed 450 trajectories of image data from human players to train a behavior cloning model
- Built a Q-Learning neural network algorithm to improve agent performance in stochastic Space Invaders

### Counter-Strike Performance Analyzer

*Computer vision assistant for multiplayer video game*

- Trained YOLOv8 object classification model using Roboflow API on videos from the game Counter-Strike 2
- Developed Flask portal allowing replay uploads to analyze player performance metrics from classification data

### Playlistle

*Web app for guessing random daily songs from Spotify playlists*

- Built web services using Docker Compose to containerize the database, the website, and Spotify API scripts
- Configured networking with a cloud VPS and Nginx reverse proxy, delivering to 20+ users on the internet

## SKILLS

---

**Languages:** Python, Java, Kotlin, C, C++, PHP, OCaml, TypeScript, JavaScript, HTML, CSS

**Libraries and Frameworks:** Android, React, React Native, Node.js, Django, Flask, PyTorch, CakePHP

**Tools and Software:** Git, Linux, Nginx, Grafana, InfluxDB, Prometheus, Docker, MongoDB, PostgreSQL