Jonathan Chen

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EDUCATION

Cornell University — May 2026
Master of Engineering in Computer Science

Cornell University — Dec 2025
Bachelor of Arts in Computer Science, Minor in Statistics — **GPA:** 3.95/4.0

Relevant Coursework: Large-Scale Machine Learning Systems, Practicum in Artificial Intelligence, Machine Learning, Robot Learning, Computer Vision, Database Systems, Computer Networks, Operating Systems, Data Structures, Algorithms

WORK EXPERIENCE

Meta — June 2025 — Aug 2025
Software Engineer Intern — *Menlo Park, CA*

- Engineered functionality for auto-saving and bulk deleting drafts of photo and video content for Instagram Reels
- Designed APIs to store and retrieve Reels drafts locally on Android phones using Kotlin and SQLite database
- Conducted A/B tests on features for Instagram Feed, drove a 3% increase in post creation by improving drafts reliability
- Collaborated cross-functionally with designers to deliver new Reels screen layouts with Kotlin and Jetpack Compose

Cornell Department of Computer Science — Aug 2024 — Present
Research Assistant — *Ithaca, NY*

- Researched scientific applications of generative AI and LLMs with Python and PyTorch under Professor Jennifer J. Sun
- Co-authored workshop paper *Agentic Superoptimization of Scientific Analysis Workflows* accepted to COLM 2025

Oracle — May 2024 — Aug 2024
Software Engineer Intern — *Austin, TX*

- Developed contactless check-in features with PL/SQL and Oracle Database for hotel management application
- Implemented OAuth integrations with cloud identity providers to make API calls between Oracle OCI services
- Removed 80% of manual effort by creating a Python microservice for attaching digital signatures to documents

Intellian Technologies — May 2023 — May 2024
Software Engineer Intern — *Rockville, MD*

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

PROJECTS

Playlistle | *React, JavaScript, Python, FastAPI, PostgreSQL, Docker*

- Built daily song-guessing game with Docker, FastAPI, Spotify API, and PostgreSQL to store archived games
- Configured networking with a cloud VPS and Nginx reverse proxy, delivering to 20+ users on the internet

Deep Q-Learning Algorithm on Space Invaders | *Python, PyTorch, OpenAI Gym*

- 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 by 500 points in Space Invaders

Ithaca Transit | *Android, Kotlin, Jetpack Compose*

- Led development and drove architecture discussions for a route planning app integrated with Ithaca's public bus system
- Built and launched Android features for displaying bus and walking directions using Kotlin and Jetpack Compose
- Architected API layer with Retrofit and Dagger Hilt to pull route information and calculate optimal route paths

SKILLS

Languages: Python, Java, Kotlin, C, C++, OCaml, TypeScript/JavaScript, HTML, CSS, SQL
Libraries and Frameworks: Android, React, React Native, Node.js, Django, Flask, PyTorch
Tools and Software: Gradle, Git, UNIX/Linux, Nginx, Grafana, InfluxDB, Docker, MongoDB, PostgreSQL
Cloud Service Providers: AWS, DigitalOcean, Lambda AI