

Peter Chen

Full Stack Developer | New York, New York (open to relocation)

917-868-9717 | peterchen@peterchen.com | linkedin.com/in/peter-n-chen | github.com/choconaut | peterchen.com

EDUCATION

Texas Christian University

Bachelor of Science in Computer Science

May 2025

RELEVANT COURSEWORK

Analysis of Algorithms, Operating Systems, Database Systems, Computer Systems, Cloud Computing, Web Technologies, Software Engineering, Object-Oriented Design

TECHNICAL SKILLS

Languages: Java, Python, SQL, JavaScript, TypeScript, HTML/CSS

Frameworks: Spring Boot (+ Security), Vue.js

Cloud & Tools: AWS (S3, EC2), Docker, Nginx, Git/GitHub, Postman

PROJECTS

County Data Webapp | *Spring Boot, Vue.js, PostgreSQL, Docker, AWS*

August 2024 – May 2025

- Collaborated on a 6-person Agile team to develop a multi-tenant parcel lookup SaaS (3 counties, 300,000 records) with role-based access control.
- Developed an Extract-Transform-Load (ETL) pipeline that loads 150,000 records in under 60 seconds
- Designed and secured RESTful APIs with **Spring Security + JWT** and **Redis** one-time tokens, protecting sensitive data
- Automated subscription billing with **Authorize.net** APIs and webhooks, eliminating 2 hours per month of manual renewals for system admins.
- Built layered tests: unit (**JUnit 5, Mockito**) for service and integration (**MockMvc, Testcontainers/Redis**) for controller

Tank Game | *JavaFX, Git*

September 2024 – December 2024

- Designed a sweep-and-prune collision detector (sorted x-axis + sliding active set) that pruned pairwise checks vs. naive $O(n^2)$ and sustained smooth gameplay with approximately 150 concurrent AI tanks
- Added a GameObjectManager to decouple game state updates from rendering via an entity list and renderer map.
- Implemented a GameObjectFactory (**Factory Method**) to centralize and standardize entity creation.
- Built distance- and line-of-sight-based targeting for AI to pursue the nearest enemy and fire missiles.
- Applied multi-level inheritance (GameObject → Tank → PlayerTank/AITank) for shared core logic with polymorphic behavior.

Portfolio | *Git, Docker, AWS, HTML/CSS/TypeScript*

2025

- Designed a **CI/CD pipeline** for a 1 GB RAM **EC2** host by offloading builds to GitHub Actions and pulling prebuilt artifacts/images on the instance, eliminating deploy freezes
- Configured **Nginx + TLS + Cloudflare DNS** for secure deployment and traffic proxying
- Built a responsive and adaptive portfolio page (dark/light mode, mobile-friendly, subtle animations) as the front door to projects.