

Peter Chen

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

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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 \rightarrow Tank \rightarrow 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.