Tom Zhang

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TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, SQL (MySQL, PostgreSQL), HTML/CSS, R, Rust
Frameworks: React.js, Next.js, Django, Django REST Framework (DRF), FastAPI, Node.js
Developer Tools: Git/GitHub, VS Code, Cursor, Docker, Insomnia, DataGrip, MySQL Workbench, PyCharm, Chrome DevTools
AI/ML Tools: OpenAI API, Groq, Prompt Engineering, AI Agents (Mastra), LangChain, PyTorch, TensorFlow
Cloud & Deployment: AWS, Vercel, PythonAnywhere, Docker, CI/CD pipelines
Libraries: pandas, NumPy, Matplotlib, Tailwind CSS, Bootstrap, Axios, Djoser, Pillow, Boto3, PyTest, Framer Motion
Miscellaneous: Ollama, Google Cloud, AWS S3, OAuth
Soft Skills: People Intelligence & Influence (Vanessa Van Edwards Masterclass), Strategic Intelligence (CIA Officers Masterclass), Sales and Persuasion (Daniel Pink), Product Design, User Research, Technical Writing, Cross-functional Collaboration, Systems Thinking, Talking to Users, Win Big in Business (Mark Cuban Masterclass)

EXPERIENCE

Founding Engineer — June 2024 – Present
OrbitView — *Toronto, ON*

- Building a two-sided marketplace connecting ambitious students with high-profile operators for recruitment and co-founder evaluation, serving 80+ users across North America
- Architected conversational AI system enabling dynamic, interactive resume experiences using OpenAI API and custom prompt engineering, replacing traditional static PDFs
- Developing OrbitView Co-Pilot, an AI coach that helps users identify and articulate hidden achievements, improving profile quality and career positioning through intelligent questioning and web research
- Designed full-stack platform with Next.js frontend and Django REST backend, implementing real-time data synchronization, user authentication, and operator dashboard for marketplace functionality
- Leading iteration to v8 with complete UI redesign and AI agent integration for automated profile enhancement

Technical Intern — July 2025 – Aug 2025
Rove Miles (YC W24) — *Remote*

- Architected flight search and recommendation engine for universal airline miles platform backed by Y Combinator, General Catalyst, and Pear VC
- Built robust data pipelines in Python integrating multiple airline APIs to collect and analyze real-time flight pricing across carriers
- Created recommendation engine calculating optimal value-per-mile ratios across redemption options, enabling intelligent flight comparison and ranking
- Developed full-stack web application with intuitive UI, interactive data visualizations, real-time processing, and advanced filtering, tested with 10-20 early users

Founding Engineer — Feb 2025 – Present
Azure Partners — *New York City, NY*

- Built company website from scratch including domain setup, UI/UX design, deployment, and CI/CD pipeline
- Independently identified need for bilingual support after observing customer demographics, designed and developed Chinese version of entire platform without prompting
- Bilingual architecture contributed to $30K+ in revenue conversions during first summer, demonstrating business-driven technical decision making

PROJECTS

LeetOps | *Django, React, Groq, Docker* — Sept 2025 – Present

- Building "the SAT for software engineers": a platform training engineers on production incident response rather than algorithmic problems
- Developed realistic on-call incident simulation environment using production logs, system context, and time-pressure scenarios
- Implemented automated grading system evaluating debugging methodology, root cause analysis, and incident communication skills

- Selected for Hack the North 2025 showcase (top 36 of 260+ projects), impressed CTO from Embark Trucks (YC W16) and CEO of Manifold.xyz

LunarPrep & PolyLarry | *Python, Django, React, Groq AI*   Aug 2025 – Present
- Built personalized SAT preparation platform with adaptive learning algorithms and AI-generated practice questions

- Discovered meta-insight that creating questions was the learning mechanism itself, achieving 1530 SAT score
- Expanded concept into PolyLarry, comprehensive learning system covering chemistry, physics, calculus, and other subjects with AI-powered study tools across disciplines

Phia Browser Extension Analysis | *Next.js, Chrome Extensions*   Nov 2025
- Identified Next.js hydration bug in browser extension architecture while building personal project, documented technical issue and onboarding friction
- Analyzed end-user experience gaps including website-extension mental model misalignment and activation confusion for non-technical users

EDUCATION

Earl Haig Secondary School   Toronto, ON
Ontario Secondary School Diploma (OSSD) — Science Society (Engineering Club President)   *Sept 2022 – June 2026*
University of Waterloo   Kitchener, ON
Catalyst for Young Entrepreneurs   *July 2024 – Aug 2024*
Harvard University   Remote
Harvard Undergraduate Ventures - TECH Summer Program   *July 2024 – Aug 2024*

ACHIEVEMENTS

Hack the North 2025   Sept 2025
- Selected for main showcase (top 36 projects) with LeetOps, impressed Brandon Moak (CTO, Embark Trucks - YC W16) and Eric Diep (CEO, Manifold.xyz) FYI, my project was ranked 12th out of 260+ other projects

AP Scholar with Distinction   2023 - Present
- 5s: Computer Science Principles, Computer Science A, Calculus BC, Human Geography — 4s: Statistics, Psychology

SAT: 1530   2025
- Achieved using self-built 'LunarPrep' platform, validating personal learning methodology

Model United Nations   2023 - 2024
- 2024 Ontario Model United Nations - Outstanding Delegate
- 2024 Canada Model United Nations - Best Position Paper

CERTIFICATIONS

Meta Back-End Developer Specialization   *Meta, June 2024*
IBM AI Engineering Professional Certificate   *IBM, July 2024*