Daniel Jin

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Summary

Full-stack software engineer with production experience in distributed systems, data infrastructure, and full-stack web development. Overhauled a distributed workflow engine and built high-throughput data pipelines serving 6,000+ queries/day, cutting infrastructure costs 75%. Comfortable across the stack — from backend infrastructure to React frontends — with a CS + Math foundation spanning algorithms, machine learning, and systems design.

Experience

Full-Stack Software Engineer, Project Pluto (Terminal X) – New York City, NY — May 2025 – Present

- Overhauled Temporal distributed workflow engine — upgraded library, fixed activity termination propagation, and implemented timeout hierarchy; reduced infrastructure costs by 75% through workflow optimizations
- Built automated data ingestion pipelines for 10+ financial sources (SEC, Green Street, thefly, Quartr) with real-time monitoring dashboards, supporting 6,000+ queries per day
- Led v2 frontend implementation — rebuilt the entire platform UI including landing page, answer page, source table, data room, and chat interface across the full stack (React, Node.js, gRPC, Prisma)
- Executed zero-downtime database migrations on production MySQL

Product Management Intern, Baidu – Beijing — Jun 2024 – Aug 2024

Shipped an LLM-powered natural-language-to-SQL BI product at a $32B AI company, coordinating with engineering on production LLM integration; managed delivery of 5 customer-facing products, cutting time-to-delivery 40%.

Education

New York University (GPA: 3.632/4.0) — Sep 2023 – May 2025

Master's in Computer Science at Courant Institute of Mathematical Sciences

Coursework: Machine Learning, NLP, Distributed Systems, Operating Systems, Compiler, Algorithms

Rutgers, The State University of New Jersey (GPA: 3.727/4.0) — Sep 2019 – May 2023

Double major in Computer Science, Mathematics, minor in Linguistics, Graduated with great distinction

Skills

Programming Languages: Java, Python, C, C++, JavaScript, TypeScript, Go, OCaml, SQL, LaTeX; Coq, L∃∀N (coursework)

Tools: React, Node.js, gRPC, Prisma, Temporal, GCP, Kubernetes, MySQL, Grafana, PyTorch, Flask, JUnit, ROS

Specialized Skills: Distributed Systems, Machine Learning, NLP, Compiler Design, Unit Testing, Formal Methods (coursework)

Projects

Transit-Driven Retail — AI model predicting NYC retail vacancies using transit and crime data — 2024

MiniOO (github) — object-oriented language interpreter in OCaml: recursive-descent parser (Menhir/ocamllex), small-step operational semantics, and a static type checker — 2023

BMRSs for Phonological Analysis (github) — presented at AMP 2022, UCLA — 2021–2023

Teaching

Data Structure Course Assistant, New York University – New York City, NY — Sep 2023 – May 2025

Developed JUnit/shell grading tools used for 800+ students' assignments per semester; independently led recitations and office hours for 60+ students per semester (100% positive feedback)

Intro to CS Head TA, Rutgers University – New Brunswick, NJ — Sep 2020 – Dec 2023

Designed recitation materials and led weekly sections for a 1000+ student intro CS course; trained and managed 30+ section leaders per semester

Achievements

2nd place, 2020 Princeton Micro-mouse Competition (East Coast) — Rutgers IEEE Robotics Team; built autonomous vehicle for IGVC, training obstacle detection models in ROS