

Justin / Ziheng Zhong

+1 424-216-6666 | zz3750@nyu.edu | justinzhong@gmail.com | [website](#)

EDUCATION

University of Toronto St. George Campus, Toronto, Ontario, Canada <i>Arts and Science Bachelor; Statistics and Mathematics Double Major</i>	09/2021 – 07/2025
New York University, New York, United States <i>Master of Science; Management and Analytics</i>	09/2025 – 05/2027

TECHNICAL SKILLS

- AI Coding: CodeX, Claude Code, agentic workflow design, agent prompt engineering, LLM output validation.
- Programming Languages: Python, Java, JavaScript, SQL, R, Swift.
- Frameworks & Platforms: Spring Boot, SwiftUI, SwiftData.
- Tools: Git, Maven, Xcode, OracleDataModeler/SQLDeveloper.

WORK EXPERIENCES

XiaoMi - Proretail App - Clue Analysis Function Iteration - Java - Backend Developer	07/2024 – 08/2024
<ul style="list-style-type: none">• Added three types of clue statistics modules along with detailed drill-down information, including comparative analysis of clue ownership by store and employee, as well as detailed data and related content for each clue.• Modified the logic of an existing clue filter condition to support more detailed filtering requirements.• Added two new clue filtering conditions and a new interface, which improves the overall response time of calculating the total number of clues by approximately 100 ms after reading the clues from the database, through optimized SQL logic and the elimination of unnecessary data transmission.	

PROJECTS

Coin - iOS Spending Tracker - Swift / SwiftUI	03/2026 – 05/2026
<ul style="list-style-type: none">• Built a privacy-focused iOS spending tracker with SwiftUI, supporting fast expense entry, monthly budgets, category analytics, search/filter/sort tools, widgets, and Siri Shortcuts.• Implemented multi-currency tracking with per-expense currency storage, reporting-currency conversion, offline fallback rates, and optional weekly live exchange-rate refresh.• Designed local-first data workflows, including JSON import/export, customizable payment methods, and editable spending categories.• Implemented on-device Apple Intelligence insights to rewrite and rank spending observations, with a deterministic local fallback for unsupported devices.	

Media Manager using the Spotify API (Project Link) - Java	09/2023 – 12/2023
<ul style="list-style-type: none">• API testing: Tested the usability of Spotify in Java, filtering required commands, and establishing a shortcut to obtain Spotify tokens through hoppswitch.io.• Developed all GUI based on Java Swing library.• Main program coding and some usecases coding: addsong, searchsong.	

NASA Space App Challenge (Hackathon Event) (Project Link) - Java / JavaScript	09/2025 – 10/2025
<ul style="list-style-type: none">• Designed and implemented the primary Java backend using Maven for dependency management, including building REST-style API endpoints to fetch, process, and serve data from multiple official NASA APIs.• Developed core data-processing logic to support real-time and manual data fetching, ensuring reliable handling of large-scale astronomical datasets and error handling for missing or null values.• Collaborated with simulation-related backend logic implementation, supporting Monte Carlo based impact simulations and orbital dynamics calculations to model potential asteroid impact scenarios under user-defined parameters.• Collaborated with frontend development by defining data structures and API contracts, enabling visualization of asteroid trajectories, fireball locations, hazard assessments, and statistical trends through an interactive dashboard interface.	

Analyzing Trends in U.S. Residential Real Estate Prices (Project Link) - R	03/2024 – 04/2024
<ul style="list-style-type: none">• Retrieved and processed large-scale housing price data from Zillow Research using R (tidyverse, dplyr, tidyr), handling missing values, inconsistencies, and time-series alignment across regions and housing types.• Used R and statistical modeling to analyze 20 years of U.S. residential real estate price trends across states and property types, developing predictive models to fit and forecast future market trends.• Built clear visualizations with ggplot2 to show long-term trends and regional differences for a non-technical audience.	

Toxi-Can: Visualizing Canada's Industrial Pollutant Releases (Project Link) - R / JavaScript	10/2024 – 12/2024
<ul style="list-style-type: none">• Retrieved and cleaned Canada's National Pollutant Release Inventory (NPRI) data and Statistics Canada geographic boundary shapefiles using R (tidyverse, sf/rgdal), handling facility-level pollutant releases across provinces.• Built a multi-page interactive website featuring a Leaflet-based facility map, Plotly emissions breakdowns, and a human body health impact visualization, using HTML/CSS/JavaScript with D3.js and Scrollama for scrollytelling.• Designed a narrative-driven web experience to communicate complex environmental pollution data to a non-technical audience, combining R (ggplot2, dplyr, tidyr, Plotly) for data analysis with a custom front-end deployed via GitHub Pages.	

LEADERSHIP

FRC - FIRST Robotics - Team Leader	07/2017 – 06/2021
<ul style="list-style-type: none">• Founded and captained Team 8204 in my high school.• Previously served as Robot Driver and Engineer for Team 5451, earning top-four finishes at international competitions in Sydney, Shanghai, and Pittsburgh.	