

Ted Jesus C. Chua

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[Analytics professional](#) with 3 years experience. Skilled in aligning data solutions with organizational requirements.

Competencies

Languages: Filipino, English

Data Analysis: Python, SQL, [Tableau](#)

DevOps: [AWS](#) (Cloud Computing), GNU Make (Orchestration)

Data Engineering (ETL): dbt (SQL Modeling; Automation), psql (Postgres CLI)

Statistics: Hypothesis Testing, Sensitivity Power Analysis (Simulation), Regression, [Clustering](#)

Professional Experience

Research Scientist

Mar 2024 – Present

UChicago Urban Labs (Policy Think Tank)

Chicago, IL

- Translate research objectives of large-scale experiments into technical specifications
 - * Engineered a data warehousing solution with **SQL**, **dbt**, and **Python** to audit 1.5M arrests for data integrity violations
 - * Estimated 40 minimum detectable effects across 8 KPIs in **Python** for a priori sensitivity analysis of a [multicity experiment](#)
 - * Conducted 10 permutation tests (statistical inference) in **Python** to assess the internal validity of a [multischool experiment](#)
- Engage with cross-functional stakeholders to address business needs using data science and engineering
 - * Transformed 300M rows into a single source of truth for [national incident-level crimes](#) using **Python**, **Make**, and **Bash**
 - * Guided 3 projects on applying [machine learning](#) in **Python** to link disparate data assets and enable downstream analyses
 - * Developed an [FBI API](#) wrapper in **Python** that automates data reporting of 18,884 police agencies for senior leadership
- Provide tailored mentorship to team members based on individual experiences and technical proficiencies
 - * *Devise* 3 **Jupyter Notebooks** that break down assigned tasks in a prototyping environment for a summer 2025 intern
 - * Authored an 8-page training material (**LaTeX**) on A/B testing and programming paradigms for a summer 2024 intern
 - * Trained 3 junior staff across 2 projects through interactive demonstrations of **CLI tools** and engineering best practices

Junior Research Scientist

Jul 2022 – Feb 2024

UChicago Urban Labs (Policy Think Tank)

Chicago, IL

- Implemented 12 A/B tests in **R** as linear regressions with multiple hypothesis adjustments to evaluate a [citywide experiment](#)
- Unified open-source data of 20+ cities in **R** at the police district level to build a recruitment pool for a [multicity experiment](#)
- Deployed a Selenium-driven web scraper in **Python** to automate pagination & extraction of a public database for 5000+ pages
- Performed **SQL** manipulation in an on-prem Postgres data warehouse to summarize juvenile arrest statistics in Chicago

Education

BSc, Quantitative Economics

Emory University, Atlanta, GA, Aug 2017 – Aug 2021

- Courses: Econometrics, Mathematical Statistics I / II, Advanced Statistics, Linear Optimization, Nonlinear Optimization