

Ted Jesus C. Chua

919-208-0376 | Chicago, IL | chuatedjesusc@gmail.com

EDUCATION

Emory University

BSc, Quantitative Economics

Atlanta, GA

Aug 2017 – Aug 2021

- Coursework: Econometrics, Financial Econometrics, Mathematical Statistics, Advanced Statistics, Abstract Vector Spaces, Linear Algebra, Linear Optimization, Nonlinear Optimization, Empirical Methods & Machine Learning

PROFESSIONAL EXPERIENCE

Crime Lab, University of Chicago

Associate Data Analyst

Chicago, IL

Jul 2022 – Present

- Engage in statistical analysis of randomized controlled trials that implement & evaluate violence intervention initiatives to promote public safety at local and national levels
 - * **Implemented regression analyses of violence involvement in R** under varying subgroups & outcome windows to finalize study findings of Youth Advocate Programs
 - * **Wrote and deployed a web scraper in Python** that autonomously collected 5000+ pages of data from a public database to support the Policing Leadership Academy's (PLA) outreach efforts with Columbus Division of Police
 - * **Spearheaded the integration of the FBI Crime Data API in Python** through an end-to-end pipeline to validate Uniform Crime Reporting (UCR) data and streamline technical assistance requests in PLA
 - * **Designed modular pipelines in Python and R** that process policing data to determine violent jurisdictions for PLA recruitment, leading to 52 units randomized into control/treatment across the first two cohorts
 - * **Conduct large-scale data reconciliation in R using high-performance computing (Slurm)** within a team of two to produce a short-list of small-medium police agencies that satisfy PLA programming constraints
- Mentored a summer-fall intern by managing workstreams and setting weekly check-ins to foster professional development
- Develop experimental designs to address research questions in collaboration with all levels of internal staff
- Present weekly reports to research and analytics teams for strategic decision-making and external communications

PROJECTS

Geospatial Analysis of Chicago Neighborhoods (Python, SQL)

Fall 2023

- Built an ETL pipeline by sourcing; pre-processing; & harmonizing administrative datasets from the US Census Bureau API and Chicago Data Portal into a **local database**.
- Queried tables for interactive **visualization** of neighborhood-level statistics of Chicago, including population adjusted robbery rates in the past five years.

Spectral Clustering of Spotify Data (Python)

Spring 2021

- Examined the inter-connectivity of music using spectral clustering in a team of four students, then presented findings to undergraduate mathematics class.

UNDERGRADUATE EXPERIENCE

Emory Division of Pediatric Infectious Diseases

Image Analyst

Atlanta, GA

Sept 2019 – Dec 2019

- Analyzed virus-cell fusions in Icy and ImageJ at the Melikian Lab under the supervision of a postdoctoral fellow to generate training data for a clustering algorithm

Atlanta Department of Watershed Management

Safety and Security Intern

Atlanta, GA

May 2019 – Aug 2019

- Served as a first point-of-contact to Atlanta constituents who are under investigation for residential and commercial water theft, namely by clarifying local ordinances and helping them legally restore service with the city

Emory Clinical Cardiovascular Research Institute

Research Assistant

Atlanta, GA

Sept 2018 – Apr 2019

- Assisted in database management of 7000+ patients who undergo cardiac catheterization at Emory University Hospital, including patient history; evaluation of diagnostic reports for relevant findings; and follow-up procedures

ADDITIONAL INFO

Languages: Filipino, English

Software: Python, R, PostgreSQL

Personal Website: teddythepooh.netlify.app