Ted Jesus C. Chua

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Education

BSc, Quantitative Economics — Emory University, Atlanta, GA, 2017 – 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 — Chicago, IL

Research Analyst — Mar 2024 – Present

- **Engage in statistical analysis of crime prevention programs**
  - Implemented simulation-based power analysis in Python to estimate the minimum detectable effect (MDE) of the Policing Leadership Academy (PLA) on violent crimes and discretionary arrests
  - Produced a weighted index of crime rates and demographic estimates for 800+ police agencies to empirically match similar pairs for randomization (control / treatment) into PLA
- Develop experimental designs to address research questions in collaboration with research and analytics teams
- **Present weekly reports to internal staff** for strategic decision-making and external communications
- **Serve in a leadership capacity as a point-person for two new analysts in PLA**, providing regular guidance and support to current & forthcoming workstreams

Associate Research Analyst — Jul 2022 – Feb 2024

- Conducted program evaluation of violence intervention initiatives in a randomized controlled trial setting
  - Performed regression analyses in R to finalize study findings for Youth Advocate Programs
  - Executed large-scale data reconciliation in R using high-performance computing (Slurm) to identify a short-list of police agencies that satisfy PLA programming constraints
  - 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
  - Wrote and deployed a web scraper in Python that autonomously collected 5000+ pages of data from a public database to support PLA's outreach efforts with Columbus 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
- Mentored a summer intern by managing workstreams and setting weekly check-ins to foster professional development
- Leveraged the Chicago Police Department (CPD) Data Infrastructure, an internal PostgreSQL database, to query confidential public safety data—crimes, arrests, victimizations—for analyses

Additional Info

Languages: Filipino, English
Software: Python, R, PostgreSQL
Personal Website: teddythepooh.netlify.app