Tutut Indriaty

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EDUCATION

University of Pennsylvania, Weitzman School of Design, Philadelphia, PA

August 2024 - May 2025

Master of Urban Spatial Analytics

GPA: 3.97/4.0

Relevant Coursework: Public Policy Analytics, Javascript Programming, Geospatial & Cloud Computing, Transportation Planning

Bandung Institute of Technology, Bandung, Indonesia

July 2014 – October 2018

Bachelor of Science in Urban and Regional Planning

GPA: 3.17/4.0

Relevant Coursework: Spatial Pattern and Structure, Planning Information System, Urban Planning Studio, Urban Infrastructure

TECHNICAL SKILLS

Project Management & Workflow: Agile methods, task tracking, version control, documentation management

Collaboration & Visualization Tools: GitHub, Microsoft Teams, Miro **Programming & Data Tools:** R, Python, SQL, JavaScript (HTML, CSS)

Geospatial & Analytics Platforms: ArcGIS, QGIS, PostGIS, GeoDa, Google Cloud Platform, Postman, Firebase **Modeling & Analytical Methods:** Regression, Correlation, Time Series, Predictive Modeling, Clustering

PROFESSIONAL EXPERIENCE (1/2)

Institute for Transportation and Development Policy (ITDP) Indonesia, Jakarta, Indonesia

July - Oct 2025

Transport Intern

- Led end-to-end preparation of EV charging and logistics hub datasets, including cleaning, validation, and metadata documentation to ensure interoperability and reproducibility.
- Conducted comparative affordability benchmarking across 10+ countries and spatial analysis of logistic hubs-EV charging
 accessibility to identify underserved areas and recommend charging infrastructure planning.
- Interviewed and coordinated with PLN and KOLEKSI, integrated stakeholder insights into policy recommendations and drafted the preliminary EV Charging Infrastructure Report.

Ministry of Public Works and Housing, Bali and South Tangerang, Indonesia

Land Acquisition Analyst

April 2022 - July 2024

- Led geospatial analysis and survey for 1,200+ land parcels, achieved 99% data accuracy, streamlined valuation and community consultation.
- Reviewed appraisal tender budgets and documentation to ensure efficiency and compliance with project standards.
- Developed and delivered progress presentations and mapping outputs to 20+ stakeholders including regional agencies and the Governor of Bali to enhance coordination and transparency.

Ministry of Public Works and Housing, Jakarta, Indonesia

Urban and Regional Planning Specialist/Individual Consultant

Jan – Mar 2022; Jul 2020 – Aug 2021

- Led end-to-end planning cycle for 10+ regional and new-city infrastructure programs, from data collection and survey design to feasibility review and concept drafting.
- Produced regulatory and policy analyses integrating infrastructure projects with spatial, environmental, and socioeconomic plans for the National Infrastructure Mid-Term Masterplan.
- Represented the ministry in coordinating 20+ stakeholders across FGD and Rakorbangwil forums, ensured alignment of local priorities with central funding.
- Prepared task plans, budgets, and KAKs, ensuring compliance with project TORs and efficient use of survey resources.
- Authored two policy briefs with spatial analytics, field findings, & policy recommendation to guide investment priorities.

PROFESSIONAL EXPERIENCE (2/2)

PT Studio Cilaki 45 Urban Planning Consultant Firm, Bandung, Indonesia

Urban Planning Assistant

October – December 2021

- Co-produced project management deliverables for Bali farmland conversion control study, coordinated field surveys, data verification, and documentation to improve spatial data accuracy for WebGIS.
- Co-arranged and facilitated stakeholder meetings and FGDs with local agencies, mapping problems and policies to improve farmland conversion control policy in Bali.
- Contributed to technical reports and presentation materials for policy discussions and client workshops.

DKI Jakarta Transport Agency, Jakarta, Indonesia

GIS Junior Analyst

April 2019 – July 2020

- Served as the sole GIS analyst in the department, managed spatial data processing, digitization, and visualization of 200+ Jakarta road segments, completed missing datasets for traffic policy and KPI reporting.
- Created GeoJSON datasets and interactive mapping tools that improved citywide traffic monitoring and urban mobility planning across city departments.
- Conducted data cleaning and validation on freight transport datasets to enhance logistics policy accuracy and reliability.
- Trained and guided 10 city KPI administrators on geospatial data collection and digitization, strengthening institutional data quality and capacity.

PROFESSIONAL & ACADEMIC PROJECTS

Passenger Load Intelligence System (PLIS) on Transjabodetabek Buses (Jakarta, Indonesia): Javascript, R (link)

2025

- Led development of **Indonesia's first AI-powered passenger monitoring dashboard** for Transjabodetabek buses, integrating CCTV detections of hundreds of daily movements.
- Co-designed data architecture and developed encrypted API integration (Postman) with full documentation to ensure secure, interoperable data exchange within Dishub DKI.
- Enhanced 100% transparency and subsidy planning through automated, cross-agency monitoring between Dishub DKI and PT Transjakarta.

Dynamically-Priced Parking Management System in El Paso, Texas: R, JavaScript (<u>link</u>, <u>R markdown</u>, <u>presentation</u>)

2025

- Co-developed an elasticity-based demand model and interactive pricing dashboard to support El Paso's shift toward datadriven, dynamic parking policy.
- As Research Lead, led and integrated literature and policy review on parking management system in 5+ cities in the U.S.
- Applied Agile methodology with weekly sprints, coordinating between team members and El Paso City Planning staff to iteratively refine dashboard features and analytics outputs.
- Aggregated and anonymized hundreds of transaction records to protect privacy while ensuring accuracy for policy simulation and revenue forecasting.

Land Acquisition Process Dashboard for Toll Road: ArcGIS, JavaScript (link)

2024

- Conceptualized and prototyped a new dashboard model to address transparency and tracking gaps identified during prior land acquisition work.
- Built an interactive, UX-focused map to visualize parcel status and streamline coordination among project offices, consultants, and affected communities.
- The prototype was adopted internally as a reference design for future national land acquisition and grievance-monitoring systems.

Additional projects available at tututind.github.io/portfolio