Sreehari Pulickamadhom Sreedhar

Policy Analysis and Economics

+61 450087293 ✉ spulickamadhom@gmail.com ✉ u7322074@anu.edu.au 🏠 Canberra, ACT

in/sreehari-sreedhar ⃝ github.com/orectique

Profile

Data-driven policy analyst with expertise in microsimulation and economic modeling, focused on delivering actionable insights for complex policy challenges.

Areas of Expertise

Agent-Based Modelling - Policy Analysis - Microsimulation - Negotiation and Mediation - Statistical Analysis and Modelling - Machine Learning

Professional Experience

Modeller - Junior Policy Advisor, *(Australian Local Government Association)*   **Canberra, ACT** *06/2024 - 10/25*

- Developed a centralized knowledge base of data at the council level, streamlining policy analysis for local governments.
- Designed and maintained small-area microsimulation models, enabling estimation of LGA level impacts of various policies with greater precision.
- Delivered rapid, targeted analyses for Policy Directors on welfare, climate adaptation, and Commonwealth grants, supporting strategic decision-making.

Research Intern, *(Mandala Partners)*   **Canberra, ACT** *09/2023 - 12/2023*

- Synthesized comparative policy research to clarify the impact of federalism across Australian states and territories, informing client recommendations.
- Engineered robust indicators for quality of life, education, and healthcare using multifactor statistical modeling, enhancing the depth of policy analysis.

Research Assistant, *(QuantEcon@ANU)*   **Canberra, ACT** *07/2023 - 12/2023*

- Applied high-performance computing and dynamic programming to solve classical economics problems, increasing research efficiency and accuracy.
- Co-authored and reviewed QuantEcon lecture materials with leading professors, elevating the quality and reach of the educational platform.
- Led a workshop on multidimensional weighting and constrained sampling in the context of spatial microsimulation, boosting participant proficiency in economic modeling.

Lead Data Analyst, *(Amrita Vishwa Vidyapeetham)*   **Coimbatore, TN** *10/2021 - 05/2022*

- Analyzed large-scale sociological survey data for a joint government-university project, delivering actionable findings for project recommendations.
- Built an intuitive geospatial data analysis tool for non-technical social scientists, increasing adoption and usability among field researchers.
- Developed and delivered workshops on ethical data usage and deidentification, improving data integrity and compliance across research teams.

Research Intern, *(Dr. Peter J. Kempthorne, MIT)*   **Remote** *04/2021 - 06/2021*

- Conducted spatial analysis and aggregation of ACLED social unrest data, revealing key trends in protest frequency for academic publication.
- Developed new metrics for unrest severity using perceived violence and latent intensity, enabling more nuanced mapping and comparison of unrest periods.
- Co-authored paper accepted for presentation at Joint Statistical Meetings 2022.

Education

Master of Intl. and Dev. Economics, *(Australian National University)*   **Canberra, ACT** *02/2024 - Present*

Relevant topics: Microeconomic policy - Econometrics and modelling - Game theory and competition - Static and dynamic optimization - Development policy

- Developed and implemented accelerated CGE models with state-of-the-art optimizers, enhancing the analysis of complex economic scenarios.

- Applied experimental and quasi-experimental methods in coursework and research, strengthening proficiency in policy evaluation and impact assessment.

Bachelor of Applied Data Analytics, *(Australian National University)*   **Canberra, ACT** *02/2023 - 12/2023*

Relevant topics: Demographic cohort analysis - Regression modelling - Social network analysis - Data wrangling and mining

- Built and validated microsimulation models to analyze the spatial distribution of Stage-3 tax cut impacts, providing insights into regional disparities.

- Used neural network classifiers and graph analysis to study suspected state-backed troll accounts on Reddit, contributing to the understanding of online manipulation.

Mediation and Conflict Management, *(Harvard Law School)*   **Remote** *Spring 2022*

Relevant topics: Negotiation and mediation - Conflict resolution

- Engaged in classroom simulations and case study analyses, developing effective negotiation and conflict resolution skills.

Data, Economics, and Development Policy - MicroMasters, *(MIT - JPAL)*   **Remote** *02/2022 - 08/2022*

Relevant topics: Microeconomics - Econometrics - Qualitative analysis - Survey design - Development policy - Research ethics

- Completed rigorous coursework in microeconomics, econometrics, and development policy, with a focus on evidence-based approaches to global challenges.

- Applied quantitative and qualitative methods to analyze real-world development interventions, emphasizing research ethics and effective survey design.

Integ. MSc. Data Science, *(Amrita Vishwa Vidyapeetham)*   **Coimbatore, TN** *08/2020 - 12/2022*

Relevant topics: Statistical modelling - Database management and design - Cryptography - Optimization - Real analysis - Linear algebra

- Developed a strong foundation in statistical modeling, database management, and optimization, applying these skills to real-world data science projects.

- Collaborated on interdisciplinary research, leveraging advanced analytical techniques to address complex problems in cryptography and data analysis.

- Transferred to ANU for a more policy-focused curriculum, aligning academic trajectory with career goals in policy analysis.

Other Courses

- International Political Economy of Decarbonization - Harvard DCE

- Monetary Policy Analysis and Forecasting – International Monetary Fund (IMFx)

- Effective Leadership through Emotional Intelligence – University of Oxford (Online)

- MicroMasters in Entrepreneurship – Indian Institute of Management, Bangalore (IIMBx)

Skills

- **Languages/Frameworks:** Python, Julia, MATLAB, R, Stata, Power BI, Excel

- Simulation, Econometric Modelling, and Analysis

- Data Wrangling and Mining, Pipelining and Management, Visualization and Communication

- Neural Networks and Deep Learning

- Natural Language Processing