

Orville Dustin Mondal

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EDUCATION

The Pennsylvania State University

PhD in Economics

August 2017 - present

Delhi School of Economics, University of Delhi

M.A. in Economics

May 2015

University of Delhi

B.A. in Economics

May 2013

EXPERIENCE

Graduate Teaching Assistant, The Pennsylvania State University

Aug 2017 - May 2022

- Teaching assistant for undergraduate courses in microeconomics (Fall 2017-Fall 2018).
- Teaching assistant for econometrics: PhD (Spring 2019), Masters (Fall 2019- Fall 2020, Fall 2021, Spring 2022)

Research Assistant, The Pennsylvania State University

Jan - May 2021

- Created code base to analyze impact of an experimental intervention on uptake of mobile money usage among migrant workers in Bangladesh using Julia.
- Prototyped a Bayesian method to determine potential future sites on which to conduct an experiment to test the impact of improved access to mobile money among migrant workers on remittances sent to a home household.

Risk Analyst, Credit Risk Oversight, American Express India Pvt. Ltd

June 2015- May 2016

- Conducted simulations of the effect of varying portfolio health on expected long term credit performance.
- Derived long term capital requirements for successful business operations.
- Involved in data analysis aimed at adjudging credit card portfolio risk for US and International Markets.

PROJECTS

Bounding Treatment Effects in Experiments with Non-Compliance: The Role of Follow up Surveys | *Julia, Stata*

- Proposed new methods to estimate the impact of an experimental treatment using data from randomized trials.
- Proposed a model to explain why trial participants choose to accept or reject an offer of treatment.
- Designed estimators which uniquely exploit data from follow up surveys for non-complying participants.
- Applied proposed methods on data from the Job Training Partnership Act study in Julia.

Semiparametric Identification of Binary Choice Models with Misreported Outcomes (with Rui Wang) | *Julia*

- Proposes new methods to identify parameters of a binary choice model when outcome data is potentially misreported.
- Analyzed theoretical properties of the proposed identified sets of parameters.
- Described practical estimation routines to tractably implement proposed methods.
- Designed and implemented simulation study to empirically validate estimation strategy.

Surrogate Welfare Maximization and Treatment Assignment Rules | *Julia, R*

- Proposed a class of treatment assignment rules which assign applicants to one of several treatments.
- Focused on individualized assignment rules which depend on applicant specific characteristics.
- Analyzed theoretical and empirical properties of proposed methods.
- Estimated assignment rules as solutions to constrained optimization problems in Julia using data from a randomized trial.

IN PROGRESS

Structural Priors (with Michael Gechter, Keisuke Hirano) | *Julia, R, Stata*

- Proposes a model to rationalize migrant workers' decision to remit money to their family at home using either traditional means or a newer digital transfer option.
- Estimated parameters of the model on data from a field experiment in Bangladesh using classical minimum distance.
- Designed site selection procedure to choose sites for future field study in Bangladesh, India and Pakistan.

AWARDS

• Pennsylvania State University Graduate Research assistantship award Fall 2017-Spring 2023 • Dr Balvir and Ranjana Singh Memorial Scholarship (2015) • Krishna Raj Summer Fellowship (2014) • Dr. Manmohan Singh Fellowship (2013)

TECHNICAL SKILLS

• **Languages:** Julia, Matlab, Stata, R

• **Tools:** Econometrics (maximum likelihood, multinomial logistic regression, non-parametric regression, GMM estimation, Minimum distance estimation), Causal Inference (Difference in differences, regression discontinuity design, instrumental variable methods), Numerical Optimization Methods (linear/non-linear programming, nested fixed point methods)