Advait R. Aiyer

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RESEARCH INTERESTS	development economics; inequality; health economics; statistical methodology; Bayesian modeling; machine learning and network analysis

EDUCATION

The Wharton School of the University of Pennsylvania, Philadelphia, PA, USA
Ph.D. in Applied Economics   **2020 –**

The New School for Social Research, New York, NY, USA
MS in Economics   **2018**

St. Joseph's College of Arts and Sciences, Bangalore University, India   **2014**
BSc. in Economics, Mathematics, Statistics

AWARDS

The New School for Social Research, Dean's Fellowship Award   **2017**

The New School for Social Research, Dean's Merit Scholarship   **2015**

TECHNICAL SKILLS

PROGRAMMING LANGUAGES
R, Stan, Python [scikit-learn], Mathematica, Octave, LaTeX, Stata

APPLICATIONS
Bayesian hierarchical models; partial pooling; MCMC sampling including Hamiltonian Monte Carlo algorithms; machine learning; variational inference; expectation maximization; panel data analysis; time series analysis; network analysis and data visualization; R package development

PUBLICATIONS

JOURNALS AND CONFERENCES

Bayesian Analysis of Randomized Controlled Trials (w. A. Pavlakis and J.K. Bautista), *International Journal of Eating Disorders*, DOI: 10.1002/eat.22928, 2018.

Multilevel modeling of Infant Mortality in India. (w. A. Pavlakis and J.K. Bautista) *[revise and resubmit at the Journal of Development Studies]*

The Relationship between Infant Mortality Rate and Health Expenditure in India: A Bayesian Approach, *Social Science Research Network (SSRN)*, 2016.

Substantiation of democracy as a responsibility of the media, *Proceedings of the National Conference on Media Ethics and Social Responsibility*, [ISBN 978-81-7086-697-8], 2013.

WORKING PAPERS

The Structure of Input-Output Linkages and Economic Growth (w. J. Yang, L.D Torres-Gonzalez, F. Lafond and D. Farmer).

Caste, access to credit and social engagement: A network theoretic approach.

Corruption in licensing and the canonical social interaction model.

Bayesian hierarchical models relating growth rates, debt to GDP ratios and financial stress (w. C. Schoder).

RESEARCH AND WORK EXPERIENCE

Abdul Latif Jameel Poverty Action Lab (J-PAL South Asia), Goa, India   **Jun 2018 - Present**
Research Associate [The Economic Consequences of Depression]
- Work with Profs. G. Rao (Harvard University), F. Schilbach (Massachusetts Institute of Technology), J. Haushofer (Princeton University), J. de Quidt (IIES, Stockholm University) to conduct research in the field of behavioral development economics
- Lead implementation of behavioral experiments and surveys in the field, to study how depression and psychotherapy affect economic behavior like risk taking, information processing, and beliefs

Columbia University, New York, NY, USA   **Oct 2017 - Present**
- Develop teaching material for Bayesian Statistics and Introduction to Stan with Prof. A. Gelman and Dr. B. Carpenter
- Working with Prof. A Gelman, M. Morris and J. Gabry to write a book on Bayesian Statistics with Stan
- Working on contributing to RStanArm package - facilitating ARIMA models

The New School for Social Research, New York, NY, USA
Research Assistant [Quantitative Reasoning Department]   **Aug 2017 - Apr 2018**
- Work with Prof. R. Flek
- Help develop teaching tools for statistics and probability and make reproducible Mathematica notebooks to aid the teaching of statistics

Amundi Asset Management, Abu Dhabi, U.A.E
Internship [Institutional Investment Sales Department]   **Summer 2015**
- Analysis for institutional investor strategies, researched the institutional market in the Middle East and helped sign new clients

TEACHING EXPERIENCE

The New School for Social Research, New York, NY, USA
Instructor [Quantitative Reasoning II: Research Methods and Data Viz.]   **Fall 2017 - Spring 2018**
- Primary instructor for the course, teach statistics, probability, and applications using Mathematica

Graduate Teaching Assistant [Advanced Microeconomics I, GECO 6200]   **Fall 2016**
- Instructor for the lab component of a core PhD course in microeconomics. (w.Prof. S. Reddy)

Specialist Math Tutor [New School University Learning Center]   **Sep 2015 – Sep 2016**
- Taught mathematics, economics, statistics, data analysis and computing

LANGUAGES

English (native) • Hindi (fluent) • Tamil (fluent) • Arabic (basic reading and writing) • Bengali (basic speaking) • Malayalam (basic speaking) • Kannada (basic speaking)

INTERESTS

motorcycles, aquascaping, succulents, basketball, swimming, Pink Floyd

REFERENCES

- **Prof. Gautam Rao**
  Department of Economics
  Littauer Center M-30, Harvard University, Cambridge, MA, 02138
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- **Prof. Andrew Gelman**
  Department of Statistics, Department of Political Science
  1016 Social Work Bldg (Amsterdam Ave. at 122 St.), Columbia University, New York, NY, 10027
  gelman@stat.columbia.edu • +1-212-851-2142 / +1-212-229-5100 x3443

- **Prof. Johannes Haushofer**
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  Stockholm University 106 91 Stockholm, Sweden
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