Aranya Chakraborty

PhD Candidate, Department of Economics, McGill University

855 Sherbrooke Street West, Montreal, QC, Canada H3A 2T7

(+1) 514-699-9655 | aranya.chakraborty@mail.mcgill.ca | aranyac.github.io | aranyac | @aranyaecon

Personal Details

Date of Birth	April 24, 1993
Citizenship	India
Research Interests	Development Economics, Applied Microeconomics

Education

McGill University *Montreal, Canada*

PhD in Economics *2017-Present*

- *PhD Supervisory Committee:* Professor Sonia Laszlo (Primary), Professor Matthieu Chemin, and Professor Francesco Amodio.
- *Completed written Comprehensive Examinations* in Development Economics, Industrial Organization, Microeconomics, Macroeconomics.

University of Calcutta *Kolkata, India*

M.Sc. in Economics *2014-2016*

- *Special Papers:* Game Theory and Information Economics, Advanced Econometrics, Resource and Environmental Economics.
- *Group Project Title:* "Financial Integration, Stock Price Volatility and Economic Growth- A Panel Data Analysis in BRICS Nations".

Ramakrishna Mission Residential College (Autonomous), Narendrapur *Kolkata, India*

B.Sc. (Honours) in Economics *2011-2014*

- *General Courses* in Statistics and Mathematics.

Experience

Department of Economics, McGill University *Montreal, Canada*

Teaching Assistant *2017 - Present*

- ECON 313: Economic Development 1, Winter, 2021-22 & Fall, 2021.
- ECON 314: Economic Development 2, Winter, 2019-20, & 2022.
- ECON 416: Topics in Economic Development 2, Winter, 2021.
- ECON 473: Income Distribution, Winter, 2021 & Fall, 2021.
- ECON 305: Industrial Organization, Fall, 2019.
- ECON 230: Microeconomic Theory, Fall, 2018.
- ECON 227: Economic Statistics, Winter, 2018.
- ECON 310: Intro to Behavioural Economics, Fall, 2017 & 2020.

Department of Economics, McGill University *Montreal, Canada*

Research Assistant for Professor Sonia Laszlo *2020-2021*

- Analyzed data collected through a lab-in-the-field experiment with Peruvian potato farmers.
- Conducted review of the related literature.

Skills

Languages	English (Fluent), Bengali (Native), Hindi (Native)
Programming	Stata, R, Python, EViews (Advanced); Matlab (Basic)
Data Science Tools	Git, Jupyter Notebook, GIS, Google Earth Engine
Others	LaTeX, Microsoft Office

Professional Activities

Conference and Seminar Presentations

2022	Seventeenth CIREQ Ph.D. Students' Conference (June)	*Montreal, Canada*
2022	CEA-CDESG Annual Conference (June)	*Ottawa, Canada*
2022	CIREQ Lunch Seminar (April, July)	*Montreal, Canada*
2015	*Conference on WTO, Trade and Agriculture* organized by CWS-IIFT (October)	*New Delhi, India*

Additional Courses/ Workshops Completed

2022	*GIS for Quantitative Spatial Data Analysis* by Wheeler Institute for Business and Development	*Virtual*
2022	*African History through the lens of Economics* by Wheeler Institute for Business and Development	*Virtual*
2022	*BREAD-IGC Virtual PhD Course*	*Virtual*
2021	*Data Science Tools Workshop* organized by Montreal×Montevideo Econ Lab	*Virtual*
2021	*Complex Network Analysis: Tools for Economic Development* by Pau Milán in Barcelona GSE Summer School	*Virtual*
2021	*Mini-Course on Causal Inference* by Scott Cunningham in McGill University	*Virtual*
2018	*Introduction to GIS Methods in Economics* by Giorgio Chiovelli and Sebastian Hohmann in McGill University	*Montreal, Canada*

Professional Services

Organizer

2020-2021	*Applied Micro Breakfast*, Department of Economics, McGill University	*Virtual*

Memberships

2022-	Canadian Economics Association (CEA)
2022-	Northeast Agricultural and Resource Economics Association (NAREA)

Administrative Experience

2020-	*PhD Representative*, McGill Economics Graduate Association (MEGA)	*Montreal, Canada*

Community Services

2021	Volunteer for *International Buddy Program*, McGill University
2011	Volunteer for *National Service Scheme*, India from Ramakrishna Mission Residential College (Autonomous)

Other Services

2022	Chair for the session on *Technology, Development and Inequality* in CEA-CDESG Annual Conference	*Ottawa, Canada*

Awards, Grants, and Fellowships

Scholarships

2021	*Graduate Award* from Professor Sonia Laszlo, McGill University
2021	*FRQSC Stipend* from Professor Francesco Amodio, McGill University
2021	*SSHRC Stipend* from Professor Francesco Amodio, McGill University
2020	*SSHRC Stipend* from Professor Francisco Ruge-Murcia, McGill University
2019	*McCall MacBain Fellowship*, McGill University
2019	*FRQSC Stipend* from Professor Laura Lasio, McGill University
2019	*CIHR Stipend* from Professor Erin Strumpf, McGill University
2018	*Bank of Canada Stipend* from Professor Francisco Ruge-Murcia, McGill University
2017-2021	*Graduate Excellence Fellowship*, McGill University

Awards

2015	Professor Dhirendranath Datta Memorial Prize for securing First Class (First position) in Economics Honours in the Degree Examinations of 2014, Ramakrishna Mission Residential College (Autonomous).

Working Papers

- "Optimal Network Based Targeting for Technology Adoption in Developing Countries" (Job Market Paper)
  Abstract: How do we use existing social ties to improve the adoption of a new technology? I explore optimal network-based targeting when the expected benefit associated with the new technology varies at the household level. In particular, I focus on two types of targeting: targeting households central to the network and targeting based on the likelihood of adoption. I develop a theoretical framework where initially uninformed agents engage in DeGroot learning to decide whether or not to get fully informed about a new technology. Conditional on being fully informed, they then decide whether or not to adopt the new technology. The model predicts the possibility of low information equilibria where nobody will adopt the new technology even if it's efficient for some of them to do so, and targeting is needed. My simulations suggest that the optimal targeting strategy in such a scenario relies on the underlying heterogeneity in the population. If heterogeneity is high in terms of the applicability of the new technology, targeting based on the likelihood of adoption performs better than centrality-based targeting. Conversely, centrality-based targeting works better if the population is more homogeneous. I test these predictions using data from Malawi and provide evidence supporting my theoretical model. I argue that population heterogeneity in benefits from a technology matters for the success or failure of alternative targeting strategies that promote that technology.

- "The Role of Experience in Learning for Index Insurance Products: Evidence from Rural Kenya"
Abstract: This research focuses on understanding the role of experience in learning for index insurance products, using data from Index Based Livestock Insurance (IBLI), Kenya. More specifically, I analyze the possible heterogeneity of effects in terms of subsidy and knowledge treatment groups on both demand and knowledge for the product, separately. The final results support a model of rational behaviour, where payout experience leads to increase in both demand and learning, but disaster experience, more frequently observed in the data, leads to an increase in demand with no associated learning effect. This can explain the decreasing demand associated with the product over sales periods. With respect to the exogenous treatments, I find discount treatments to be most effective in channelling a positive learning effect from the payout experience and, argue for a policy that compliments both type of treatments to increase demand in the short and long run.

Work In Progress

- "Assessing the Impact of Judicial Independence in Developing Countries: Evidence from Rural Bangladesh" (with Matthieu Chemin)

- "Beliefs about Uncertain Technologies: Experimental Evidence from a Coordination Game in Peru" (with Jim Engle-Warnick, Javier Escobal, and Sonia Laszlo)

Book Chapters

- "Food Insecurity, Price Volatility and Trade: A Panel Data Analysis in Developing Countries" (with Panchanan Das and Swayambhu Mukherjee), **Indian Agriculture under Multilateral and Regional Trade Agreements - Competitiveness and Food Security**, Sharma and Bathla (eds.), Bookwell, Delhi, 2017, 177-194.

Other Papers

- "Industrial Performance in West Bengal: Analysis of Technical Efficiency with ASI Data" (with Panchanan Das and Swayambhu Mukherjee), 2016.

References

Professor Sonia Laszlo
Department of Economics
McGill University
Leacock Building, Room 526
855 Sherbrooke Street West
Montreal, QC, Canada H3A 2T7
Phone: +1-514-398-2102
Email: sonia.laszlo@mcgill.ca

Professor Matthieu Chemin
Department of Economics
McGill University
Leacock Building, Room 419
855 Sherbrooke Street West
Montreal, QC, Canada H3A 2T7
Phone: +1-514-398-5077
Email: matthieu.chemin@mcgill.ca

Professor Francesco Amodio
Department of Economics
McGill University
Leacock Building, Room 514
855 Sherbrooke Street West
Montreal, QC, Canada H3A 2T7
Phone: +1-514-398-2184
Email: francesco.amodio@mcgill.ca