# **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 | 💌 @aranyacecon

## 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

• General Courses in Statistics and Mathematics.

2011-2014

## Experience \_\_\_\_\_

TEACHING ASSISTANT

#### **Department of Economics, McGill University**

Montreal, Canada

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, EViews, R, ₺₸₣X(Advanced); Matlab (Basic)

**Data Science Tools** Git, Jupyter Notebook

# **Professional Activities**

#### **CONFERENCE AND SEMINAR PRESENTATIONS**

2022 NAREA Annual Meeting (Scheduled)2022 CEA Annual Conference (Scheduled)

2022 CIREQ Lunch Seminar

2015 Conference on WTO, Trade and Agriculture organized by CWS-IIFT

Mystic, USA Ottawa, Canada

Montreal, Canada

New Delhi, India

### ADDITIONAL COURSES/ WORKSHOPS COMPLETED

2022	African History through the lens of Economics by Wheeler Institute for Business and Development (ongoing)	Virtual
2022	BREAD-IGC Virtual PhD Course (ongoing)	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

## **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)

# 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**

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 true expected benefit associated with the new technology varies at the household level. In particular, I focus on two types of targeting: targeting people 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. This may happen when people are not optimistic about the prospect of the new technology. Targeting is needed to improve adoption in this context. My simulations suggest that the optimal targeting strategy in such a scenario relies on the underlying heterogeneity in the population. If the 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. My results show support in favor of my theoretical model. I argue that in designing targeting strategies for technology adoption we should pay particular attention to the characteristics of the population.
- "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