VARADA SHROTRI

Phone: (773) 798-7123   1151 E, 61st Street, Chicago IL, 60637   varadashrotri@uchicago.edu

EDUCATION

The University of Chicago Harris School of Public Policy   **Chicago, IL**
Candidate - Master of Public Policy with a Certificate in Data Analysis *(STEM Certified)*   *June 2021*

St. Xavier's College, University of Mumbai   **Mumbai, India**
Bachelor of Arts in Economics   *June 2017*

Summer Program, Yale University   **New Haven, CT**
Corporate Finance   *June 2016*
International Law and Foreign Policy

EXPERIENCE

DEVELOPMENT IMPACT EVALUATION (DIME) AT THE WORLD BANK   **Washington DC**
Research Intern   *July 20 – Mar 21*
- Research Assistant to Mr. Eric Mvukiyehe on Fragility, Conflict and Violence (FCV) research program - a portfolio of 35 impact evaluations in over 25 countries
- Assisted on creating a policy brief summarizing the research on Community Driven Development Programs (CDDs) in the Democratic Republic of Congo (DRC) as well as other CDD programs around the world.
- Worked on Impact Evaluation Project to determine to effects of cash grants for female entrepreneurship on women empowerment in Tunisia *(ongoing)*.
    - Assisted in creating and deploying the endline survey by framing questions for Socio-Economic and Demographic Household Data, Access to Infrastructure and Basic Services, Antisocial Behaviour, Men's Perspective on Gender Roles, Community and Civic Engagement. Programmed and deployed the survey on SurveyCTO
    - Provided off-field support to field coordinator and Survey Firm in enumerator training, pilot survey and final round data collection.
    - Performed high frequency data checks, cleaning collected data from Survey CTO, preparing data for analysis and creating indices for regression analysis using STATA.

HANNA HOLBORN GRAY GRADUATE STUDENT FELLOW FOR GIS   **Chicago, IL**
Graduate Student Assistant   *Aug 20 - Present*
- Creating interactive mapping applications that show University of Chicago's campus history using ArcGIS online and ESRI's StoryMaps

UNIVERSITY OF CHICAGO SURVEY LAB   **Chicago, IL**
Graduate Research Assistant   *Jan 20 – Feb 20*
- Crime Lab is a part of University of Chicago's Urban Lab which partners with civic and community leaders to design, test and scale promising programs and policies to reduce crime and violence.
- Worked with the Survey Lab at UChicago which partnered with the Crime Lab to collect primary data in partnership with the Chicago Police Department.
- Conducted observational coding of different types of behaviours of the law enforcement officers that were participating in the study.

ERNST & YOUNG   **Mumbai, India**
Full Time Analyst   *Jul 17 – May 19*
- Full time Analyst in Risk Management in the Advisory practice of EY with a focus on the Technology sector.
- Conducted SOX Control Testing for a major US based ATM Manufacturing Company for India and Singapore entities. Tested control effectiveness for various business processes under the Sarbanes-Oxley Act. On-boarded and led new members on the engagement
- Performed Account and Revenue Recognition Review of a global business process outsourcing company. Examined manpower management process, quality check, invoicing and revenue recognition as per GAAP Norms.
- Assessed legal compliance of India's largest software services company with Employment, Payroll, Immigration, Social Security, Data Privacy, Health and Safety Laws for UK and Romania.
- Developed Compensation Structure for India's largest hospitality company looking to expand to other countries. Created Legal Compliance Framework regarding tax structure, tax return filings, social security, payroll processing for immigrant and non-immigrant employees for France and Japan.

SIEMENS LTD   **Mumbai, India**
Intern at Corporate Strategy Department   *Aug 16 – Nov 16*
- Analysed economic indicators using Centre for Monitoring Indian Economy (CMIE) database for monthly update meetings.
- Updated key data sets, indices and created graphs and visuals for Management and provided user support.

TEACHING ASSISTANT ROLES

- TA for Microeconomics for Dr Daniel Rappoport – Booth School of Business, University of Chicago, *(Graduate Course)*
- TA for Microeconomics for Public Policy for Dr Thomas Coleman and Dr Zarek Brott-Goldberg – Harris School of Public Policy, University of Chicago *(Graduate Course)*
- TA for Econometrics for Dr Azim Sheikh – Department of Economics, University of Chicago *(Undergraduate Course)*

RESEARCH AND PUBLICATIONS

- Machine Learning project on predicting the outcomes of Judicial Cases in Uttar Pradesh in India using the novel dataset put together by the Development Data Lab on Judicial Bias. Pre-processed data by doing feature selection, downsampling, SMOTE and handling missing data. Used supervised learning methods such as random forest, boosting, logit with forward stepwise selection and neural networks.
- Research project on 'Application of Machine Learning and Natural Language Processing in Market Predictions' using Supervised Machine Learning models such as OLS, Ridge Regression, Support Vector Machine and Backpropogation.
- Research project on 'Spatial Variation in Infant Mortality Rate in Chicago' for Spatial Regression Analysis Class.
  - Investigated whether the mortality rates of a neighbourhood are associated with the features of surrounding neighbourhoods after accounting for its specific characteristics.
- Presented & published a research paper in Arthniti (ISN 2277-1344) – Official Economics Publication of St. Xavier's College - "Finding the Golden Mean: Import Substitution vs Export Promotion in East Asia"
  - The paper hypothesises that a shift in policy from ISI to EP leads to an increased growth rate. Results using the Van den Berg model showed a significant relation between the growth of imports and the growth of GDP for 6 out of the 7 countries.
  - The paper was awarded as the best paper in the seminar and was subsequently published in Arthniti (ISN 2277-1344) – the official publication of the Economics Department of St. Xavier's College.
- Published a research paper in Arthniti (ISN 2277-1344) "The Environmental and Economic Trade off- A Case Study of the Bhutanese Economy"
  - Bhutan regards environmental stability as the primary point of their national development framework. The paper aims to test the validity of the claim by carrying out a study of its economic growth and the rise in the pollutants emitted by the nation using the Environmental Kuznets Curve Analysis.
  - The paper employs the Econometric Kuznets Model by David Stern to determine the validity.

COURSES AND TRAININGS

- January 2020 – Completed "Social and Behavioural Sciences IRB Human Subjects Protection Training Course" required by the SBS IRB for any researcher considered to be engaged in human subjects research activities

- Advanced Microeconomics
- Macroeconomics
- Statistics for Data Analysis
- Econometrics
- Game Theory
- Artificial Intelligence for Public Policy
- Survey Questionnaire Design
- Program Evaluation
- Spatial Regression Analysis
- Analytical Politics
- Mathematical Foundations for Machine Learning
- Machine Learning
- Energy in the Developing World
- Economic Growth and Development

SKILLS

- Language Skills: English (Fluent), Marathi (Native), Hindi (Fluent), French (Beginner)
- Computing Skills: Python (pandas, scikit-learn, bokeh, nltk, geopandas), R (tidyverse, ggplot2, cluster, dplyr, caret, h2o), STATA, GeoDa, QGIS, ArcGIS, MS Office, Power Bi, SPSS, SurveyCTO, LaTeX, Github