Srikar Katta

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Education

Temple University — Philadelphia, PA
BS, Mathematics & Computer Science | BA, Economics — *August 2018 – May 2022*
Minors in Psychology & Data Science — *GPA:3.98/4.00*
Completed 15/30 Credits Towards MA in Economics

Research Experience

Undergraduate Research Assistant — August 2020 – Present
Drs. Edoardo Airoldi, Ken McAlinn, Jeanne Ruane — *Philadelphia, PA*

- Improved network modeling by inventing generative algorithm able to characterize 350/456 real-world networks better than state of the art mechanistic network models
- Automate topic and network modeling analyses for 600,000+ tweets, saving 60% in reporting time
- Develop data science textbook covering estimation strategies and models like latent Dirichlet allocation
- Advanced counterfactual imputation methods to estimate causal effects without untreated units or variables

Undergraduate Research Assistant — August 2018 – Current
Dr. David V Smith — *Philadelphia, PA*

- Research decision making and financial scam susceptibility using field surveys ($N = 3000$) and lab experiments
- Trained 6 research assistants to wrangle and visualize data in R by creating and implementing 12 lesson plans
- Developed modified game of Blackjack in Python with graphical user interface to measure risk-taking behavior

Research Intern — May 2019 – May 2020
Federal Reserve Bank of Philadelphia — *Philadelphia, PA*

- Used regression techniques to compare business' and professional forecasters' inflation expectations
- Advised policy by surveying 8,000+ local businesses on perspectives of economy and inflation levels
- Created surveys and analyzed and visualized data for 16 press releases; work cited by CNN, Reuters, and WSJ

Technical Experience

Data Science Intern — May 2021 – August 2021
Disney+ and ESPN+, Disney — *New York, NY (Remote due to COVID-19)*

- Developed python package for automated subpopulation identification process in post-prediction error analysis
- Analyzed behavior of models predicting user churn, subscription propensity, and premier-access movie upsells
- Designed cross-platform recommender system to overcome the cold start problem resulting in honorable mention award in internal datathon

People Data Science Intern — June 2020 – August 2020
Dyson, Inc — *Chicago, IL (Remote due to COVID-19)*

- Predicted COVID-19 cases using machine learning methods with 6.5% error rate to guide store reopenings
- Operationalized organizational chart development using R Shiny, saving $25,000+ of work annually
- Automated HRIS data auditing using Python and developed Tableau dashboards, saving $350,000+ annually
- Collaborated with non-technical HR team to conduct global gender pay analysis to restructure compensation plan

Intern — January 2019 – May 2019
Bureau of Labor Statistics — *Philadelphia, PA*

- Analyzed Bureau of Labor Statistics and Census Bureau datasets using R, including collection methods and usage
- Researched correlates of immigrant income gap in US states to inform immigration and labor policy

Teaching Experience

Teaching Assistant — August 2020 – December 2020
MATH 1031: Elements of Statistics/Data Science — *Temple University*

Teaching Assistant — January 2020 – May 2020
CIS 1051: Introduction to Programming in Python — *Temple University*

Tutor — January 2020 – March 2020
Mathematics Department: Probability & Statistics, Calculus I-III, Linear Algebra — *Temple University*

Published Research

- Katta, S. 2019. Taking a Knee to Take a Stand: An Analysis on The Bhagavad Gita's Application to the Take a Knee Movement. Perceptions, 5(1). https://tujournals.temple.edu/index.php/perceptions/article/view/153.

Conference Presentations

- Hackett K, Katta S, Jarcho JM, Giovannetti T, Fareri DS, Smith DV (October, 2020). Relationship between cognition, social support, and susceptibility to fraud among older adults before and during COVID-19. Presented at International Neuropsychological Society 2021 Conference. [virtual meeting due to pandemic]
- Katta S, Hackett K, Jarcho JM, Giovannetti T, Fareri DS, Smith DV (October, 2020). Financial Exploitation in Older Adults: Characterizing the Role of Sociodemographic Factors, Cognition, and Social Decision Making. Presented at the 17th meeting of the Society for Neuroeconomics. [virtual meeting due to pandemic]
- Kelly V, Slipenchuk M, Katta S, Clithero JA, Smith DV (June 2019). The More the Merrier: Participants Value Having More Options to Choose From. Presented at 9th meeting of the Interdisciplinary Symposium on Decision Neuroscience. Durham, NC, USA.
- Henninger NM, Katta S, Kelly V, Hackett K, Reeck C, Giovannetti T, Fareri DS, Smith DV (June 2019). Aging is associated with reductions in functional connectivity in social brain systems. Presented at 9th meeting of the Interdisciplinary Symposium on Decision Neuroscience. Durham, NC, USA.
- Smith DV, Henninger NM, Hackett K, Kelly V, DeSalme D, Muzekari B, Katta S, Giovannetti T, Fareri DS (June 2019). Fairness is Associated with Increased Connectivity between the Executive Control. Presented at 25th meeting of the Organization for Human Brain Mapping. Rome, Italy.
- Fareri DS, Kelly V, Henninger NM, Hackett K, DeSalme D, Muzekari B, Katta S, Reeck C, Giovannetti T, Smith DV (May 2019). The influence of close relationships on shared reward processing in older and younger adults. Presented at the 12th meeting of the Social & Affective Neuroscience Society. Miami, FL, USA.
- Henninger NM, Kelly V, Hackett K, Fareri DS, Katta S, Smith DV (October 2019). Age-related reductions in functional connectivity in social brain systems during an economic trust task. Presented at the 50th meeting of the Society for Neuroscience. Chicago, IL, USA.
- Katta S (April 2019). In the Eyes of the Beholder: An Analysis on the Similarities Between John Locke's *Second Treatise on Civil Government* and Thomas Hobbes' *Leviathan*. Speech presented at Temple University's Symposium for Undergraduate Research and Creativity. Philadelphia, PA, USA.

Current Research

[Submitted*, In Progress^{+}, First author†, Co-first author‡]

- "Investigating Twitter Behavior of Tax Experts in Social Network Sites" with Jeanne Ruane and TL Hill*
- "Preferential Attachment with Duplication: A Mechanistic Network Model for Generating non-Scale-free, Heavy-Tailed Networks" with Zoran Obradovic & Edoardo Airoldi$^{+\dagger}$
- "Model-Assisted Counterfactual Imputation for Causal Inference in the Absence of Untreated Units and Variables" with Jeanne Ruane & Edoardo Airoldi$^{+\dagger}$
- "Characterizing the Links between Sociodemographic Variables, Social Preferences, and Susceptibility to Financial Fraud in Middle to Late Adulthood." with Katherine Hackett, Tania Giovannetti, Johanna Jarcho, Dominic Fareri, & David V Smith$^{+\ddagger}$

Activities

Vice President, Temple University Data Science Community	December 2020 – Current
Ambassador, Honors Admissions and Transitions Team	August 2019 – Current
Attendee, SAMSI Undergraduate Workshop	May 2021 – May 2021
Volunteer, Temple Honors Appalachia	August 2018 – August 2019

Awards & Honors

CARAS Grant, Temple University — May 2021 – Current
Provost Scholarship, Temple University — August 2018 – Current
Dean's List, Temple University — August 2018 – Current
Notable Mention, Disney Streaming Service Datathon — June 2021 – June 2021
Liberal Arts Undergraduate Research Award, Temple University — August 2019 – January 2020

Skills

Languages/Tools: R, Python, Java, C, SQL, Git/GitHub, Tableau, Google Data Studio
Methodologies: Machine learning, Deep learning, Causal Inference, Econometrics, Network analysis
Libraries: Tidyverse, R Shiny, iGraph, pandas, numpy, plotly, sklearn