Daniel J. Marchetto

(412)720-3173 · daniel.marchetto@gatech.edu · www.linkedin.com/in/daniel-marchetto/

Education

Georgia Institute of Technology
Doctor of Philosophy in Public Policy, Expected 2023
Specialization: Science and Technology Policy
Master of Science in Statistics, Expected 2021

Arizona State University
Master of Public Policy, 2018

Carnegie Mellon University
Bachelor of Science in Psychology, 2016
Cognitive Neuroscience (Minor)

Research Interests

Decision Making, Human Behavior, Statistical Measurement, Machine Learning, Quantitative Analysis

Relevant Coursework

Computational Data Analysis, Data Mining and Statistical Learning, Multivariate Statistics, Nonparametric Statistics, Multivariate Calculus, Linear Algebra, Regression Analysis, Research Design, Differential Equations, Psychometrics, Econometrics, Program Evaluation, Complexity and Simulations

Current Research Projects

Research on Careers in Science Lab (in Progress). Assessing mid-career graduate students in computer science.

Data Science and Policy Lab (In Progress). Assessing Spillover Effects of HUD Programs on Utility Consumption.

Publications

Ha, S., **Marchetto, D.J.**, Dharur, S., & Asensio, O.I. (In Review). Topic Classification of Electric Vehicle Consumer Experience with Transformer-based Deep Learning.

Marchetto, D.J., Ha, S., Dharur, S., & Asensio, O.I. (2020). Extracting User Behavior at Electric Vehicle Charging Stations with Transformer Deep Learning Models. *In Proceedings of the 3rd International Conference on Advanced Research Methods and Analytics (CARMA 2020).* DOI: http://dx.doi.org/10.4995/CARMA2020.2020.11613

Ha, S., **Marchetto, D.J.**, Burke, M.E., & Asensio, O.I. (2020). Detecting Behavioral Failures in Emerging Electric Vehicle Infrastructure using Supervised Text Classification Algorithms. *In Proceedings of the Transportation Research Board Annual Meeting.* 20-03461.

Research Experiences

Research Assistant, Dr. Julia Melkers, Georgia Tech (August 2020 – Present)
- Analyzed themes relating to self-efficacy from a series of interviews with computer science graduate students
- Designed the structure and elements of a survey including the development of a self-efficacy scale

Research Assistant, Dr. Omar Asensio, Georgia Tech (August 2018 – September 2020)
- Analyzed effects of HUD funding on residential electricity consumption in Albany, GA using propensity score and genetic matching
- Implemented code in R, Python, and JSON for the creation of surveys, the analysis of data, and the creation of a neural network classification architecture (CNN, LSTM, BERT, XLnet)
- Designed the structure and elements of a survey consisting of a classification task and supplemental measures

Smart Community Corps Fellow, Georgia Tech (May 2019 – September 2019)
- Designed and implemented geohub website for City of Albany, GA utilizing ESRI's online architecture
- Created SQL database for storage and cross-departmental linkage of city records relating to economic development and utility consumption

Research Assistant, Dr. Lily Hsueh, Arizona State University (January 2017 – July 2018)
- Collected and analyzed carbon emission and Twitter data from S&P 500 companies using R and linear regression
- Performed literature searches relating to firm-level carbon emission reduction

Data Analyst Intern, Republic Services (June 2017 – August 2017)
- Led and managed a project to reduce the turnover of field employees in material recycling facilities
- Analyzed company data to find significant predictors of employee turnover using OLS regression

Research Assistant, CoAx Lab, Carnegie Mellon University (January 2014 – May 2014)
- Analyzed data obtained from participants in a sequence learning experiment using Matlab
- Performed literature searches relating to cognitive adaptation to sequence learning

Research Assistant, Okada Lab, UPMC Hillman Cancer Center (July 2010 – August 2010)
- Cultured glioma cells extracted from RAG deficient mice
- Assisted in PCR and flow cytometry of samples obtained from patients with low-grade glioma

Teaching Experience

Graduate Teaching Assistant, Georgia Institute of Technology (Spring 2020)
PUBP 8751 – Big Data and Public Policy

Graduate Teaching Assistant, Arizona State University (Fall 2017, Spring 2018)
PAF 201 – Economics and Public Policy

Conferences

3rd International Conference on Advanced Research Methods and Analytics (CARMA 2020)
- Conference Paper
- Panel Presentation

Transportation Research Board 2020 Annual Meeting (TRB 2020)
- Conference Paper
- Poster Presentation

Machine Learning at Georgia Tech (ML@GT)
- Poster Presentation

Skills

Data Analysis: R, Python, Stata, SQL, IBM SPSS, Minitab, Matlab, SAS, Excel
Analytical Techniques: (M)ANOVA, Regression, Classification, Clustering, Factor Analysis, Monte Carlo Methods, Experimental Design, Structural Equation Modeling, Psychometrics/Item Response Theory, Agent-Based Modeling, Topic Modeling