Paul J. Hamilton

phamilton@hbs.edu * 810-360-8684

CAREER OBJECTIVES

Conduct meaningful academic research that investigates how organizations can effectively leverage information technology, data science, and machine learning. Contribute to applied theory that helps organizations use these tools responsibly. Pursue a Ph.D. in management, technology and operations, information systems, or a related field.

EDUCATION

University of Michigan, Ann Arbor, MI

Bachelor of Science, May 2017 (Honors Program) - Economics (major), Applied Statistics (minor)

• GPA: 3.9/4.0 (Phi Beta Kappa); Eight-Term James B. Angell Scholar

ACADEMIC EXPERIENCE

Harvard Business School (HBS)

Research Associate (August 2019 - Present) – Profs. Iavor Bojinov, Srikant Datar, Janice Hammond & Michael Parzen

- Current research project under Assistant Prof. Iavor Bojinov studying the value of open-source software packages in the data science community.
- Current research project under Prof. Srikant Datar applying machine learning techniques to portfolio construction.
- Helped develop and teach the following courses in the MBA program, which teach data science and statistics to management students through the case method: *Applied Business Analytics*, *Introduction to Data Science*, and *Data Science for Managers I & II*.
- Wrote case studies with multiple faculty on organizational applications of data science and machine learning (see Publications).

Laboratory for Innovation Science at Harvard (LISH)

Research Associate (June 2021 - Present)

• Current research project studying social interaction data from a massively open online course; investigating how social interactions on online learning platforms contribute to student success.

University of Michigan, School of Information (UMSI)

Research Assistant (November 2015 – August 2016)

- Conducted research under Kevyn Collins-Thompson, Associate Prof. of Information & Computer Science.
- Developed natural language processing algorithm to evaluate students' understanding of key vocabulary terms.
- Reviewed academic literature in computer science, psychology, and linguistics; synthesized wide array of academic research for relevance to DSCoVAR project.

PROFESSIONAL EXPERIENCE

Analysis Group, Inc. (Economic, Financial, and Strategy Consulting)

Analyst (August 2017 – December 2018), Senior Analyst (January 2019 – August 2019)

- Worked closely with professors at top business schools and economics departments to develop expert reports for litigation related to statistics, organizational behavior, finance, and antitrust.
- Initiated, organized, and led Python training across entire firm of over a thousand professionals.
- Applied natural language processing techniques to assist document review in case work; led internal project related to automated literature reviews using a neural network.

SKILLS

- Python, R, Stata, SQL, SAS
- R Shiny, R Markdown, Jupyter Notebooks
- Inferential Statistics, Machine Learning, Natural Language Processing

PUBLICATIONS

- Grushka-Cockayne, Yael, Michael Parzen, Paul Hamilton, and Steven Randazzo. "Kaggle 2019 Data Science Survey." Harvard Business School Case 620-091, January 2020.
- Datar, Srikant M., Sarah Mehta, and Paul Hamilton. "Applying Data Science and Analytics at P&G." Harvard Business School Case 121-006, July 2020.
- Parzen, Michael, and Paul J. Hamilton. "The FIRE Savings Calculator." Harvard Business School Case 621-087, January 2021.
- Parzen, Michael, and Paul J. Hamilton. "Probability Distributions." Harvard Business School Technical Note 621-704, February 2021.
- Datar, Srikant M., Amram Migdal, and Paul Hamilton. "IBM: Design Thinking." Harvard Business School Case 121-007, April 2021. (Revised June 2021.)
- Parzen, Michael, and Paul J. Hamilton. "Introduction to Linear Regression." Harvard Business School Technical Note 621-086, June 2021.
- Bojinov, Iavor, Chiara Farronato, Janice H. Hammond, Michael Parzen, and Paul J. Hamilton. "Precision Paint Co."
 Harvard Business School Case 622-055.
- Parzen, Michael, and Iavor Bojinov. "Data Science at the Warriors." Harvard Business School Case 622-048.
- "Practical Data Skills", with Michael Parzen (accessible at dsm.business/textbook).