PETER M. CROSTA

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RECENT EXPERIENCE

Google, LLC New York, NY

Staff Quantitative User Experience Researcher, Google Search April 2023 – present

- Led surveys to understand the impact of AI Overview response tone on user sentiment and provided guidance to improve response tone based on search vertical
- Co-developed and executed measurement framework and survey strategy for AI Overviews quality
- Partnered with Data Science team to develop research-backed Human Evaluations for AI Overview responses

Senior Quantitative User Experience Researcher, Google Travel May 2021 – April 2023

- Managed user sentiment surveys, developed reporting tools, and presented insights to leadership
- Led Product Excellence launch, including sentiment survey instrumentation and implementation
- Developed new metrics for Travel on Search, supported launches through tactical studies, and led quantitative evaluations
- Developed innovative prototype evaluation solution for evaluating new designs; used measurement strategy for design evaluation, and shared technique widely
- Studied impact of price inconsistency, developing causal models that led to increased investments to improving price accuracy in Google Hotels
- Conducted foundational research for Magi/SGE Trip Planning feature, supported UI design decisions through tactical research

Data Scientist, Google Cloud Support Oct 2018 – May 2021

- Improved case volume forecast accuracy by 30% through advanced modeling and developed tools for scenario analysis and headcount estimation
- Utilized statistical methods to derive ticket handle times from complex data, reducing bias. Led impactful case flow analysis, resulting in workflow improvements
- Contributed to customer-centric dashboards, ML initiatives, and experiment design. Developed tools for efficient data analysis and extraction

Slalom, LLC New York, NY

Solution Architect, Data Science Aug 2017 – Oct 2018

- Designed data architecture for Internet of Things (IoT) product offering for major plumbing fixtures company, including strategy for ingestion, queuing, storage, and schemas
- Built predictive models in R using LASSO and Random Forest to guide top 3 cloud services provider on how to be future-ready for open source software
- Promoted from Consultant to Solution Architect after 10 months

The Noodle Companies, LLC New York, NY

Vice President of Data Science, Noodle Markets, Inc. May 2016 – Aug. 2017

- Created executive dashboards for visibility into company metrics using R/Shiny, Python, SQL
- Developed scripts to link Salesforce CRM, web application, and marketing automation tools
- Utilized machine learning and predictive modeling in Python and R to solve data availability problems and to generate insights for product, marketing, and customer success teams

Vice President of Research & Development, Noodle Education, Inc. Sep. 2014 – May 2016

- Created prototype for keyword-driven search algorithm in Lucene/Solr and led team of analysts and engineers to launch into production
- Led team of engineers and analysts to develop a search engine testing tool using Python, R/Shiny, a critical piece of product infrastructure that enables validation for millions of queries in minutes

- Managed search, data, and analytics teams of seven including data scientists, researchers, and product managers

OTHER ROLES

2U, Inc. New York, NY
Director of Research Jan. 2014 – Sep. 2014

Columbia University, Community College Research Center New York, NY
Data Scientist Aug. 2004 – Aug. 2006; Aug. 2011 – Jan. 2014

SKILLS

Computing: Expert in R; experienced in Python, Databases (BigQuery, Redshift), SQL, Unix/Linux, Git, JIRA, AWS, GCP

Econometrics and Causal Inference: experimental and quasi-experimental methods, regression discontinuity, instrumental variables, propensity score matching, difference-in-differences, Bayesian and multilevel modeling, time series analysis, categorical data models, panel data methods

Data Science: classification and regression trees, neural networks, dimensionality reduction, forecasting, network analysis, clustering, segmentation, data pipelines, dashboards

RESEARCH PAPERS (selected)

- **Does age of entrance affect community college completion probabilities? Evidence from a hazard model.** *Educational Evaluation and Policy Analysis*, 2007.
- **Can community colleges afford to improve completion? Measuring the costs and efficiency effects of college reforms.** *Educational Evaluation and Policy Analysis*, 2014.
- **Improving the targeting of treatment: Evidence from college remediation.** *Educational Evaluation and Policy Analysis*, 2014.
- **Intensity and attachment: How the chaotic enrollment patterns of community college students relate to educational outcomes.** *Community College Review*, 2014.
- **Should community college students earn an associate degree before transferring to a four-year institution?** *Research in Higher Education*, 2015.

RESEARCH, TEACHING, AND PUBLIC SPEAKING

- *Math teacher,* **International American School of Cancún**, Cancún, México (Aug. 2006 – Jul. 2008)
- *Lecturer* on data center energy measurement, **Columbia University**, New York (Apr. 2010)
- *Lecturer* in economics of education seminar, **Columbia University**, New York, (May 2013)
- *Invited speaker* in Quantitative Methods in the Social Sciences, **Columbia University**, New York (Feb. 2014, Oct. 2016)
- *Invited speaker or presenter* at over 30 professional conferences and seminars (2004 - 2014)
- *Teaching Assistant,* Data Science for Social Science, **New York University,** New York (Jan. 2016)

EDUCATION

Columbia University, New York, NY
PhD, Economics and Education

Cornell University, Ithaca, NY
BA, Economics

ADDITIONAL INFORMATION

Peer Reviewer: *Educational Researcher, Research in Higher Education, Journal of Higher Education, Educational Evaluation and Policy Analysis, Education Finance and Policy*