
EDUCATION

Ph.D. Economics <i>University of Illinois</i>	2000 <i>Champaign, IL</i>
M.S. Statistics <i>University of Illinois</i>	1999 <i>Champaign, IL</i>
M.S. Economics <i>Texas Tech University</i>	1994 <i>Lubbock, TX</i>
B.S. Economics, Magna Cum Laude <i>Ohio State University</i>	1992 <i>Columbus, OH</i>

PROFESSIONAL EXPERIENCE

Principal <i>Weikel Consulting</i>	January 2023 — Present <i>Westerville, OH</i>
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- A boutique analytic consultancy primarily focused on measuring the causal effects of marketing, predictive analytics in support of marketing initiatives, and prescriptive analytics to identify a best course of action for a company to take with its marketing outlays.
- Also consults on the accuracy, completeness, consistency and validity of cross-media measurement metrics for data of varying collection mechanisms and transformation processes.

Senior Vice President, Global Research & Analytic Development Senior Vice President, Analytic Development <i>Nielsen</i>	2013 — 2022 August 2011 — 2012 <i>Chicago, IL</i>
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- Recruited, managed, mentored, and led a department of 50 data scientists with advanced STEM degrees and software engineers on improving the lift measurement of distribution, assortment, traditional measured media, paid and viral social media, promotional offers, pricing, competitive effects and exogenous factors to increase future sales and profitability of clients.
- Developed automated and scalable model-based solutions to solve clients' business problems through complex econometric, statistical, and machine learning methods that include causal inference models, marketing mix models, customer segmentation, baselining, promotional lift models, transactional data analysis, hierarchical price and quantity index creation, classification and prediction via random forests and deep learning, randomized control trials, and marketing mix and price optimization.
- Partnered with the Product and Technology departments to implement, test, and deploy these models for use in the automotive manufacturing, retailing, consumer-packaged goods manufacturing, financial services, and pharmaceutical sectors in a modern web-based platform.
- Partnered with the Technology department to determine multi-tenant elastic computational requirements to meet service-level agreements for analytic products. For a specific analytic application this work included determining number of workers, cores per worker, worker memory and disk storage sizes. Also determined and launched cost-effective data storage solutions for the enterprise to meet service-level agreements.
- For R&D purposes investigated, developed, tested and deployed recent econometric, statistical, supervised learning and unsupervised learning modeling advances by staying current with recent industry-specific and academic research, attending seminars, holding symposiums, and identifying and vetting companies for corporate acquisition and data partnerships.
- Conducted research on privacy-preserving computational technologies. This research resulted in the company implementing a differential privacy solution so partners may use company proprietary data to conduct analytics, where results from these analytics are used to improve business operating practices and the effectiveness of their marketing activities.

- Led multiple teams that implemented automated and scalable analytic solutions in cloud-hosted walled gardens provided by multiple digital platforms.
- Applied my knowledge of big data and analytics to determine the viability strategic business initiatives. These due diligence exercises led to the acquisition of multiple big data and analytic start-ups.
- Budget and financial planning responsibility for Global Research & Analytic Development department.

Director, Advanced Analytics

2012 — 2013

Director, Customer Marketing Analytics

2007 — 2008

L Brands

Columbus, Ohio

- Provided predictive and prescriptive analytic direction on execution of CRM programs for six retail brands: Victoria's Secret, La Senza, Bath & Body Works, Express, The Limited Stores, and Henri Bendel.
- Analytical efforts included measuring effectiveness of CRM marketing, measuring media, and pricing on awareness, consideration, purchase intent, customer recommendation, sales and profitability.
- Created and executed experimental designs to determine the effectiveness and efficacy of select marketing tactics.
- Designed brand tracker surveys and questionnaires to track brand equity measures across time and to identify tactics and messages that led to improving the measures.
- Hired, trained, managed, and mentored a team of 6 data scientists.

Senior Vice President, Consulting Services

2008 — August 2011

Director, Analytic Services

2002 — 2007

Marketing Analytics, Acquired by Nielsen in August 2011

Evanston, IL

- Led a team of more than 30 data scientists and consultants on measuring the effectiveness of media, pricing and other client marketing efforts; annually completed more than 60 large-scale projects for more than 20 multi-billion dollar companies. Presented analytically based results and subsequent recommendations to high-level executives and stakeholders.
- Identified and scoped additional work opportunities with new and existing clients through networking and relationship building. Participated in all aspects of engagement planning, proposal development, presentation of proposals, and completion of sale.
- Planned and determined technology and labor resources to ensure timely and profitable project completion.
- Provided senior leadership and guidance on in-house developed historical and simulation tool applications.
- Assumed P&L responsibility for Consulting Services department.

Senior Statistician, Research and Development

2000 — 2002

Discover Financial Services, then a subsidiary of Morgan Stanley

Riverwoods, IL

- Developed customer segmentation models using various statistical analysis techniques including CHAID, multivariate, factor, cluster, discriminant, and univariate analyses.
- Designed response, price elasticity, revenue/profit, risk, attrition and anti-attrition, balance transfer, direct marketing, customer targeting, telemarketing, propensity to revolve, and value at risk predictive models using behavioral, historical, credit bureau, demographic, and transactional data in the context of acquisition, risk, and portfolio management.
- Analyzed and measured efficacy of promotional campaigns and target marketing through appropriate test designs and data analysis, and made strategic recommendations to improve marketing efforts.
- Expert in coding, extracting, consolidating and processing large volumes of transactional and non-transactional data from internal and external sources.
- Served as subject matter expert and resource to mentor junior statisticians, and communicated complex statistical findings to upper management in a non-technical manner.

ACADEMIC EXPERIENCE

Adjunct Professor, Ross College of Business
Franklin University

2022 — Present
Columbus, OH

- Teach undergraduate and graduate-level courses on business analytics, data visualization, data wrangling, statistics, marketing analytics, causal inference, time-series analysis, predictive analytics, machine learning, deep learning, business research methods, and technology that is used to conduct business analytics.
- Cross-course analytic methods discussed and implemented include graphical and non-graphical exploratory data analysis, web analytics, regression, logistic regression, multinomial regression, design of experiments, multiple comparisons, multiple imputation, causal inference models, bootstrapping, classification and regression trees, random forests, neural networks, deep learning, topic models, clustering, principle component analysis, community detection, recommendation systems, and Bayesian inference.
- Redesign existing course curriculum and case studies by integrating recent cross-discipline methodological advances in causal inference, community detection, and deep learning.
- Redesign Google Analytics 4 web analytics curriculum module.
- Collaborated with 3 other faculty members on redesigning the educational technology integration course, which focuses on providing faculty the educational technology tools and information they may use to promote active learning in their courses.

TEACHING EXPERIENCE

Franklin University
Ross College of Business

2022 — Present
Columbus, OH

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| • <i>BUSA 603, Marketing Management & Analytics</i> | Instructor |
| MS in Business Analytics Course | Spring 2023, Fall 2023, Spring 2024 |
| • <i>BUSA 695, Capstone in Business Analytics</i> | Instructor |
| MS in Business Analytics Course | Fall 2023, Spring 2024 |
| • <i>DATA 621, Advanced Analytics</i> | Instructor |
| MS in Data Analytics Course | Summer 2023 |
| • <i>MATH 601, Introduction to Analytics</i> | Instructor |
| Graduate Course | Spring 2023, Spring 2024 |
| • <i>MATH 215, Statistical Concepts</i> | Instructor |
| Undergraduate Course | Fall 2022, Spring 2023, Spring 2024 |

University of Illinois

1994 — 1999

Department of Economics

Champaign, IL

- *Economics 502, Economic Statistics*
Master of Science in Policy Economics (MSPE) Course Assistant Instructor
Fall 1996, Fall 1997, Fall 1998, Fall 1999
- *Economics 504, Time Series Analysis in Economics*
MSPE Course Assistant Instructor
Spring 1999
- *Economics 503, Econometrics*
MSPE Course Assistant Instructor
Spring 1997, Spring 1998
- *Economics 535, Econometric Analysis II*
Doctoral Course Assistant Instructor
Spring 1996
- *Economics 532, Econometric Analysis I*
Doctoral Course Assistant Instructor
Fall 1995
- *Economics 102, Microeconomic Principles*
Undergraduate Course Teaching Assistant
Fall 1994, Spring 1995

Texas Tech University

1993 — 1994

Department of Economics

Lubbock, TX

- *Economics 3311, Intermediate Macroeconomics*
Undergraduate Course Instructor
Summer 1994
- *Economics 2302, Principles of Economics II - Introduction to Macroeconomics*
Undergraduate Course Instructor
Fall 1993 and Spring 1994

TECHNICAL REPORTS

- Burke, P., Hsu, K. Y., Karaoglan, L., Kodakkat, N., Lokhandwala, M., Lu, S., Mantha, S., Poortinga, V., Pourazarm, S., Saha, S. K., Wei, S., and Weikel, B. (2021). Data structuring, governance, hygiene, and quality control: A review and new ideas. Product Leadership GRAD Technical Report, Nielsen
- Do, A., Lu, S., Zhu, H., Mut, M., Wei, S., Lakshmanan, C., Poortinga, V., and Weikel, B. (2021). Lift accuracy and precision for the synthetic control method of Market Lift. Product Leadership GRAD Technical Report, Nielsen
- Feiger, D., He, Y., Im, J. K., Karaoglan, L., Mantha, S., Poortinga, V., Reynolds, T., Saha, S. K., Shah, S. B., Solana, J., Tang, L., Weikel, B., Xiao, Y., and Xu, J. (2016). Digital Media Consortium II. Product Leadership GRAD Technical Report, Nielsen
- Karaoglan, L., Weikel, B., and Xiao, Y. (2015). Aggregation bias in price, promotion and marketing mix modeling. Product Leadership GRAD Technical Report, Nielsen
- Lokhandwala, M., Mathew, D., Narayanan, S. P., Pourazarm, S., Shah, S., Tang, L., Vignesh, A., and Weikel, B. (2022). Plan Optimize Global Research & Analytic Development Nielsen Identity Engine Report. Product Leadership GRAD Technical Report, Nielsen
- Mut, M., , Lu, S., Zhu, H., Do, A., Lakshmanan, C., Wei, S., and Weikel, B. (2020). Market Lift synthetic control method's donor pool weight estimation methodology. Product Leadership GRAD Technical Report, Nielsen
- Poortinga, V. and Weikel, B. (2018). Guidelines for effective Nielsen Mix 2 CPG modeling. Product Leadership GRAD Technical Report, Nielsen
- Saha, S. K., Kellert, S., Kodakkat, N., Yildiz, S., Li, K., Li, L., and Weikel, B. (2019). Overview of Nielsen Audience Link incrementality measurement solution. Product Leadership GRAD Technical Report, Nielsen

- Weikel, B. (2021a). Doubly robust estimation of causal effects for Nielsen MTA Lift and Buyer Lift. Product Leadership GRAD Technical Report, Nielsen
- Weikel, B. (2021b). Feature mismeasurement and effects on the predictive accuracy of supervised learners. Product Leadership GRAD Technical Report, Nielsen
- Weikel, B. (2021c). Mitigating the statistical consequences of inaccurate onboarding of impressions. Product Leadership GRAD Technical Report, Nielsen
- Weikel, B. (2021d). Notes on measuring the causal effect of marketing and observational data levels. Product Leadership GRAD Technical Report, Nielsen
- Weikel, B. (2022). Fusion as an analytic service: Discovery and recommendations. Product Leadership GRAD Technical Report, Nielsen

TALKS

Invited Talks

- *Multi-Touch Attribution Challenges and Opportunities*
Valley Forge, PA Vanguard Group, Inc.
February 2020
- *The Synthetic Control Method and Causal Inference*
Mountain View, CA Google
June 2019
- *Doubly Robust Estimation of Advertising Effectiveness*
San Jose, CA Walmart Inc.
February 2019
- *Marketing Effectiveness Measurement Methods*
Los Angeles, CA Hulu
February 2018
- *Advertising Effectiveness Measurement using Intent-to-Treat and Ghost Ads*
Santa Monica, CA Snapchat
January 2018
- *Multi-Touch Attribution Methods*
Atlanta, GA The Coca-Cola Company
August 2018
- *Nonlinear Advertising Response and Approximations*
New Brunswick, NJ Johnson & Johnson
January 2017
- *Marketing Effectiveness Measurement Methods*
Menlo Park, CA Meta (previously Facebook)
October 2016
- *Causal Inference via Observational Data Methods*
Cincinnati, OH The Proctor & Gamble Company
August 2016
- *Propensity Scores, Inverse Probability Weighting, and Advertising Effectiveness*
New York, NY iHeartMedia, Inc.
February 2016
- *Price Discounting and Brand Equity*
Oakland, CA The Clorox Company
January 2011
- *Statistics and Retail Analytics*
New York, NY Avon Products, Inc.
March 2009

Industry Talks

- *Sub-Minute TV Ratings and Advertising Effectiveness*
New York, NY Council of Research Excellence
January 2017
- *Digital Media Consortium II*
Chicago, IL Nielsen sponsored
12 Events between February 2015 and August 2016

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| • <i>Re!Think Conference</i>
New York, NY | Advertising Research Foundation
March 2016 |
| • <i>Marketing Mix Modeling Summit</i>
New York, NY | Google
January 2016 |
| • <i>Audience Measurement Methods</i>
New York, NY | Advertising Research Foundation
June 2014 |
| • <i>Digital Media Consortium I</i>
Chicago, IL | Nielsen sponsored
October 2013 |
| • <i>Marketing Effectiveness Measurement Methods</i>
New York, NY | Advertising Research Foundation
April 2008 |
| • <i>Direct Response Prediction Methodologies</i>
New York, NY | Association of National Advertisers
February 2008 |

SKILLS

Tools and Languages	Git, Gurobi, Keras, \LaTeX , Markdown, Mathematica, Matlab, Python, R, SAS, SQL, TensorFlow
Operating Systems	AWS, Azure, Linux, Mainframe, UNIX, Windows
ERP, OLAP & Project Management	Access, Agile, Apache Superset, Business Objects, Google Workspace, Canvas Learning Management System, Jira, Microsoft Office Suite, Microstrategy, Tableau
Web Analytics	Google Universal Analytics, Google Analytics 4

PROFESSIONAL MEMBERSHIP

American Economic Association
American Statistical Association

MILITARY EXPERIENCE

U.S. Air Force/Ohio Air National Guard 1986 — 1992

REFERENCES

Anh Do, PhD Decision Scientist, Meta	anh.trang.thi.do@gmail.com Menlo Park, CA
Sepideh Pourazarm, PhD Senior Manager of Data Science, Walmart Connect	sepideh.pourazarm@walmart.com, San Bruno, CA
Shweta Shah, PhD Vice President, Nielsen	shweta.bs@gmail.com Morton Grove, IL
Ross-boy Link CEO, Marketing Attribution	ross@mktatt.com Evanston, IL
John Mansour, PhD Independent Consultant	jp.mansour@comcast.net Aurora, IL