# Elea McDonnell Feit

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## **EDUCATION**

PhD, Marketing, University of Michigan, Ross School of Business, 2009 MS, Industrial Engineering (Operations Research), Lehigh University, 1998 BA, Mathematics, University of Pennsylvania, 1994

# EMPLOYMENT

LeBow College of Business, Drexel University Assistant Professor of Marketing, 2014-present

### The Wharton School, University of Pennsylvania

Lecturer in Marketing, 2010-2014, 2016-present

Fellow, Wharton Customer Analytics Initiative, 2014-present

Support the WCAI Research Opportunity program by assisting with the scoping of new data sets, reviewing proposals, training staff and facilitating researcher-sponsor symposia.

Executive Director, Wharton Customer Analytics Initiative, 2012-2014

Research Director, Wharton Customer Analytics Initiative, 2010-2012

Developed the WCAI Research Opportunity program, which promotes research in customer analytics by making high-quality data, donated by corporate partners, available to academics around the world; reviewed all research proposals; set the strategic direction for the initiative; solicited support from corporate partners and individual donors; managed WCAI programs including data distribution, grants, and conferences and a staff of 6; co-supervised a post-doctoral fellow in Statistics.

### The Modellers, LLC

#### Vice President & Methodologist, 2009-2010

Developed methods and software for market research, focusing on Bayesian design of choice experiments and Bayesian estimation of choice models; consulted on methodology issues for client projects; trained statistical analysts and market research managers; coordinated the company's Academic Advisory Board.

### **General Motors**

Project Engineer, Advanced Vehicle Development Center, 2001-2004

Research Scientist, Operations Research Department, R&D Center, 1998-2001

Developed and used choice models and satisfaction drivers models to evaluate product designs; facilitated design decision making meetings; developed methods to address marketing and operations research problems including forecasting demand using click-stream data, predicting custom-ordering behavior using choice models, and determining the optimal mix of contract and regular employees.

## American U-Brew

Operations Director, 1995-1996

# Systems Research & Applications

Economic Analyst, 1994-1996

### EXPERTISE

**Substantive**: advertising and direct marketing response, digital marketing, consumer choice and product design (particularly for automobiles), media usage

**Methodological**: missing data, data fusion, choice modeling, hierarchical models, Bayesian inference, tactical field experiments in business practice

## JOURNAL ARTICLES IN MARKETING

- 1. Helveston J.P., **E.M. Feit** and J.J. Michalek (2017) Pooling Stated and Revealed Preferences in the Presence of RP Endogeneity, *Transportation Research Part B*, forthcoming.
- Zantedeschi, D., E.M. Feit and E.T. Bradlow (2017) Measuring Multi-Channel Advertising Response, Management Science, 63(8), 2706-2728.
- Dotson, J.P., R.R. Fan, E.M. Feit, J.D. Oldham, and Y. Yeh (2017) Brand Attitudes and Search Engine Queries, *Journal of Interactive Marketing*, 37, 105-116.
- Haaf, C.G., W.R. Morrow, I. Azevedo, E.M. Feit and J.J. Michalek (2016) Forecasting light-duty vehicle demand using alternative-specific constants for endogeneity correction versus calibration, *Transportation Research Part B: Methodological*, 84, 182-210.
- Helveston, J.P., Y. Liu, E.M. Feit, E. Fuchs, E. Klampfl and J.J. Michalek, (2015) Will Subsidies Drive Electric Vehicle Adoption? Measuring Consumer Preferences in the U.S. and China, *Transportation Research Part A: Policy and Practice*, 73, 99-112.
- Feit, E.M., P. Wang, E.T. Bradlow and P.S. Fader (2013) Fusing Aggregate and Disaggregate Data with an Application to Multi-Platform Media Consumption, *Journal of Marketing Research*, 50, 3, 348-364.
- 7. Feit, E.M., M.A. Beltramo, and F.M. Feinberg (2010) Reality Check: Combining survey and market data to estimate choice models, *Management Science*, 56, 5, 785-800.
- Netzer, O., Olivier T., E.T. Bradlow, E. Dahan, T. Evgeniou, F.M. Feinberg, E.M. Feit, S.K. Hui, J. Johnson, J.C. Liechty, J.B. Orlin and V.R. Rao (2008) Beyond Conjoint Analysis: Advances in Preference Measurement, *Marketing Letters*, 19, 337-354.

## WORKING PAPERS

Novak, J., E.M. Feit, S.T. Jensen and E.T. Bradlow, Bayesian Imputation for Anonymous Visits in CRM Data. (Under revision for second round review at *Marketing Science*)

Phan, T., E.T. Bradlow and **E.M. Feit**, An Integrated Model for Dynamic Brand Equity. (Under revision for second round review at *Marketing Science*)

Dotson, J.P., M.A. Beltramo, **E.M. Feit**, and R. Smith, Modeling the Effect of Images on Conjoint Choices. (Under revision for second round review at *Management Science*)

### WORK IN PROGRESS

The benefits of stratification for measuring advertising response (with R. Berman)

The positive effect of negative buzz on purchase intent (with J.A. Han and S. Srinivasan)

Disclosing information about ad placements in online auctions (with N. Abou Nabout and S. Ada)

Assessing power in choice-based conjoint studies (with J. Howell and O. Netzer)

Sample sizes for A/B tests (with R. Berman)

### BOOKS

Chapman, C. and **E.M. Feit** (2015) *R for Marketing Research and Analytics*, Springer UseR! Series, New York.

- Average Amazon rating 4.9/5.0 in 24 reviews
- Reviewed in the Journal of Statistical Software by Thomas Rusch, October 2015, Technometrics by Stan Lipovetsky, July 2016, Interfaces by R. Jean Ruth, July 2016
- Translated to Chinese by Hui Lin and published by Beijing Huazhang Graphics & Information Co. Ltd.
- Second edition expected 2019

Feit, E.M. and B.D. McCullough, Business Experiments, expected 2019.

Zwitch, R., E.M. Feit and C. Chapman, Julia for Marketing Research and Analytics, expected 2019.

## OTHER PEER-REVIEWED ARTICLES

- Etzkorn, J.R., S. Tuttle, I. Lim, E.M. Feit, J.F. Sobanko, T.M. Shin, D. Neal, C.J. Miller (2017) Patients prioritize local recurrence risk over other attributes for surgical treatment of facial melanomas - results of a stated preference survey and choice-based conjoint analysis, *Journal of the Academy* of *Dermotology*, forthcoming.
- Turner, R.M., S.M. McDonnell, E.M. Feit, E.H. Grogan and R. Foglia (2006) Real-time ultrasound measure of the fetal eye (vitreous body) for prediction of parturition date in small ponies, *Theriogenology*, 66:2, 331-337.
- 3. Feit, E.M. and S.D. Wu (2000) Transfer Line Design with Uncertain Machine Performance Information. *IEEE Transactions on Robotics and Automation*, 16, 581-587.
- 4. Gordon, G. and **E.H. McDonnell** (1995) Trees with the same path numbers and degree sequence. *Discrete Math*, 147, 297-300.
- Gordon, G., E.H. McDonnell, D. Orloff and N. Wung (1995) On the Tutte polynomial of a tree. Congressus Numerantium, 108, 141-151.

## **INVITED CHAPTERS**

- 1. Feit, E.M. and E.T. Bradlow, Fusion Models in Homburg, C., M. Klarmann and A. Vomberg *Handbook of Marketing Research*, Springer, New York, forthcoming.
- Stahl, F., V. Valli and E.M. Feit (2017) Field Experiments in Homburg, C., M. Klarmann and A. Vomberg *Handbook of Marketing Research*, Springer, New York. [Refereed by two anonymous reviewers]
- Feit, E.M., F.M. Feinberg and P.J. Lenk (2017) Bayesian Analysis in Leeflang, P.S.H, J.E. Wieringa, T.H.A. Bijmolt and K.H. Pauwels (2017) Advanced Methods for Modeling Markets, Springer, New York. [Refereed by Leeflang and Pauwels]
- 4. Barr, M., J.K. Dokko and **E.M. Feit** (2012), Preferences for Plastic, in Barr, M., *No Slack*, Brookings Institution.
- 5. Feit, E.M., C. Pensig and J. Harper (2011) Expert Feature: Customer Analytics in Feinberg, Kinnear and Taylor, *Modern Marketing Research: Methods and Cases*, Atomic Dog.
- Christian, J., E.M. Feit and M.A. Beltramo (2007, 2011) Expert Feature: Conjoint Analysis at General Motors in Feinberg, Kinnear and Taylor, *Modern Marketing Research: Methods and Cases*, Atomic Dog.

### SOFTWARE

Dziurzynski, L, E. Wadsworth, P. Fader, **E.M. Feit**, D. McCarthy, B. Hardie, A. Gopalakrishnan, E. Schwartz and Y. Zhang (2014) BTYD: Implementing Buy 'Til You Die Models, R package available at cran.rproject.org.

### PATENT

Kitner, H.J. and **E.M. Feit**, Method of determining the best mix of regular and contract employees, US Patent 6732079.

#### **RESEARCH PRESENTATIONS**

Consumer data and product design

- Keynote Session at Design Engineering Technical Conference (August 2017)

An integrated model for dynamic brand equity

– Marketing Science (June 2017)

The benefits of stratification for measuring advertising response

- Goethe University Frankfurt (March 2017)

Discussant for Sliced Designs for Multi-platform Online Experiments by Soheil (Sol) Sadegh, Peter Z. G. Qian and Neeraj Arora

- University of Texas at Dallas Bass Conference (March 2017)

Accounting for anonymous visits in customer relationship management (CRM) data

- Wells Fargo (April 2016)

Effects of campaign creatives on advertising response

- Wharton Customer Analytics Initiative Research Symposium (March 2016)

Why do people search for brands? Search engine queries and brand attitudes

- Marketing Science (June 2015)

Measuring multi-channel advertising effectiveness using consumer-level response data

Marketing Dynamics Conference (June 2013), Temple University (July 2013), Drexel University (September 2013), Emory University (October 2013), Brigham Young University (February 2015), HEC Paris (September 2015), Washington University (January 2016), General Motors Research (July 2016), Sharif University of Technology (January 2017), Wells Fargo (June 2017)

Modeling the effect of images on conjoint choices

- University of Michigan Design Science (March 2014), Marketing Science (June 2011)

Modeling multi-platform media consumption for the FIFA World Cup

 Marketing Science (June 2010), Emory University (July 2010), WIMI in China (October 2010), ART Forum (June 2011)

Reality Check: Combining survey and market data to estimate choice models

- University of Pennsylvania (October 2008), University of Delaware (October 2008), Emory University (October 2008), University of Texas at Dallas (November 2008), Georgia Tech (November 2008), Carnegie Mellon University (November 2008), Michigan State University (November 2008), Purdue University (November 2008), Haring Symposium at Indiana University (April 2008), Marketing Science (June 2008), Advance Research Techniques Forum (Best Poster Award, June 2008) Incorporating engineering knowledge into the design of choice experiments

 Carnegie Mellon University, Design Decisions Lab (October 2007), University of Michigan Design Colloquium (November 2007)

New directions in preference measurement and choice predictions

- Presentation at Seventh Triennial Invitational Choice Symposium, Wharton School (June 2007)

Discussant for The Role of Motivating Wants in Hierarchical Network Model for Advertising by Sandeep Chandukala, H. Rao Unnava and Greg M. Allenby

- Discussant at Haring Symposium, Indiana University (April 2007)

Validating conjoint models using real-world purchase data

 Poster at Advanced Research Techniques Forum (Best Poster Award, June 2006), Poster at NSF Design, Service and Manufacturing Grantees and Research Conference, July 2006, Carnegie Mellon University, Design Decisions Lab (October 2006), General Motors Research and Development Center (September 2007)

## UNIVERSITY COURSES

Marketing Experiments (new course co-developed with Eric Bradlow for MBA students and adapted for MS Business Analytics students)

- Drexel University, Fall 2014, Fall 2015, Fall 2016, Fall 2017 (3.6/4.0)
- University of Pennsylvania, The Wharton School, Spring 2012, Spring 2013, Spring 2014, Fall 2016 (3.0/4.0)

Data-Driven Digital Marketing (new course)

Drexel University, Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017, Spring 2018 (3.8/4.0)

Introduction to Marketing Management (undergraduate)

- University of Pennsylvania, Wharton Program for Working Professionals, Fall 2010, Spring 2011 (3.2/4.0)
- University of Michigan, Ross School of Business, Winter 2007 (5.0/5.0)

Teaching Assistant for Generalized Linear Models with Rich Gonzalez (half-semester, doctoral-level)

- University of Michigan, Ross School of Business, Winter 2007

### TUTORIALS AND WORKSHOPS

Marketing Experiments (2-hour, half-day, full-day, 2-day, week)

- Catholic University Eigenstadt-Ingolstadt (October 2012), AMA ART Forum (June 2013), AMA Analytics with a Purpose (March 2014, March 2015), AMA Academy of Marketing Analytics, (September 2014, October 2015), HEC Paris (September 2015), Wharton-Google Marketing Academy (October 2015, April 2016, November 2016, June 2017, August 2017), Vienna University of Economics and Business (March 2017), Wharton Marketing Metrics (April 2017), Wharton Customer Analytics (September 2017)

Marketing Analytics in R (1-hour, 2-hour, half-day, 2-day, often with Chris Chapman)

 AMA ART Forum (June 2014), AMA Academy of Marketing Analytics (September 2014), Wharton Customer Analytics Initiative Student Workshop (October 2015, November 2016, February 2017, November 2017), Drexel IEEE Graduate Forum (January 2016, May 2016), Iowa R Users Group (July 2016), URBN (July 2016), University of Washington MBA Program (January 2017, February 2018), LeBow Analytics workshop for professionals (May 2017), Independance Blue Cross (July 2017), Temple University Doctoral Program (December 2017), Drexel University Doctoral Program (January 2017),

Choice Modeling in R (2-hour)

 Philadelphia R Stats User Group (April 2015), Azevea Brown Bag Series (May 2015), University of Michigan MBA Guest Lecture (April 2017), Boston University MS/MBA Guest Lecture (April 2017)

Introduction to Stan for Choice Modeling (4-hour, with Kevin Van Horn)

– AMA ART Forum (June 2017)

Is my advertising working? Model-Based Attribution, Media Mix Modeling, Holdout Experiments and Propensity Matching (1-hour, 4-hour)

 Wharton Customer Analytics Initiative Conference Workshop (May 2017), WebMD Sales Meeting (July 2017), Sawtooth Software Conference (March 2018), Open-source at github.com.

Hierarchical Bayes Methods for Marketing (half-day, with Jeff Dotson)

AMA ART Forum (June 2014, June 2015, June 2016, June 2017), Drexel University (Spring 2015)

Beyond the Big Data Hype (2-hour)

- The Wharton School (November 2013)

Advanced Applications of Discrete Choice Models (half-day, with Jeff Dotson)

- ART Forum (June 2011, June 2012, June 2013)

Customer Analytics (1-hour)

The Wharton School, Qiaowei Shen (Spring 2011, Fall 2011), New York University, Sam Hui (Spring 2011), Drexel University, Arun Gopalakrishnan (Fall 2013), West Chester University, Paul Arsenaut (Fall 2013)

Becoming a CBC/HB Power User (half-day, with Jeff Dotson and John Howell)

- Sawtooth Software Users Conference (March 2009)

Tutorial on Making the Most of ART Forum (half-day, with Jeff Brazell and Cindy Ford)

- ART Forum (June 2009)

Guest Lectures on Marketing Research for Product Design

 Carnegie Mellon University, College of Engineering, Jeremy Michalek (Fall 2006, Fall 2007, Spring 2010), University of Michigan, Design Science Program, Panos Papalambros, (Winter 2007, Winter 2008, Winter 2009, Winter 2013)

#### PRACTITIONER PRESENTATIONS

Panel discussion experimentation for attribution at Attribution Accelerator Conference (October 2017)

Panel discussion on women in analytics at Pennsylvania Conference for Women (October 2017)

Guest on JMP Webcast "Analytically Speaking" (August 2017)

Business Experiments: The Cheap Trick of Analytics

- Keynote at Deloitte Data Science Summit (March 2016)

Is your advertising working? (And why that is a difficult question to answer)

 Digital Analytics Association Philadelphia Symposium (October 2015), Wharton Customer Analytics Initiative Corporate Partner's Meeting (October 2015)

Occasional co-host or guest on "Marketing Matters" on SiriusXM Business Radio Powered by the Wharton School (2014-present)

Why Customer Analytics? Why Now?

 Online Marketing Summit, Philadelphia & Atlanta (keynote, July 2010), Wharton Pre-Term Lectures (August 2010), Xchange Conference (keynote, September 2011), Wharton Alumni Club of Boston (October 2011), Web Analytics Association Philadelphia Symposium (October 2011), Wharton Tech Club (November 2013), Brigham Young University (February 2015)

Panel discussion on Careers in Analytics, Philadelphia Digital Analytics Association (October 2014)

Panel discussion on Causal Inference is Hard: Lessons, Recommendations and Best-Practices, Advertising Research Foundation Audience Measurement (June 2014)

Don't tell Don Draper: Advertising has changed, Digital Analytics Association Philadelphia Symposium (October 2013)

Testing Your (Marketing) Ideas

WCAI Practitioner Webinar (September 2012), Wharton Venture Initiation Program (October 2012, October 2013, November 2014), Keynote at AMA Purposeful Analytics Conference (March 2013), Keynote at Digital Analytics Association Philadelphia Symposium (October 2013)

Why conjoint is harder than you think

- TRC Frontiers in Marketing Conference (May 2011)

## SERVICE

Editorial Board

- Marketing Science (2017)

Ad-hoc Reviewer

- Management Science (2007-present)
- Marketing Science (2010-present)
- Journal of Marketing Research (2012-present)
- Journal of the American Statistical Association (2015-present)
- International Journal of Research in Marketing (2015-present)
- Journal of Statistical Software (2015-present)
- Design Science (2015-present)
- Transportation Research (2016-present)
- Marketing Letters (2016-present)
- Journal of Interactive Marketing (2016-present)
- Nature Energy (2016-present)
- Design Engineering Technical Conference (2006-2011)

Conference Organizing

- Sawtooth Software Conference
  - \* Steering Committee (2017-present)
- INFORMS Conference on Business Analytics and Operations Research

- \* Member-at-Large, Program Committee (2017)
- \* Executive Forum Committee (2016, 2017)
- \* Program Committee Chair (2016)
- \* Marketing Analytics Track Co-Chair (2012, 2013, 2014, 2015, 2018)
- AMA Advanced Research Techniques Forum
  - \* Conference Committee (2011, 2012, 2017, 2018)
  - $\ast\,$  AMA Parlin Award Board of Governors (2017)

Doctoral Committees

- Jung An (Jenny) Han, Marketing, LeBow College of Business, Drexel University, expected 2020
- Chelsey Hill, Decision Sciences, LeBow College of Business, Drexel University, expected 2018
- Tung Phan, Statistics, The Wharton School, University of Pennsylvania, 2016
- John Helveston, Public Policy and Engineering, Carnegie Mellon University, 2016
- Julie Novak, Statistics, The Wharton School, University of Pennsylvania, 2015
- Grace Haaf, Mechanical Engineering, Carnegie Mellon University, 2014

LeBow College of Business, Drexel University

- Judge for CIO.com/Drexel Analytics 50 Award (2016)
- Faculty and staff working group for Business Analytics (2014-present)
- Faculty Advisor for Google Online Marketing Challenge (2015-2016)
- Faculty Advisor for Adobe Analytics Competition (2015-2016, 2017-2018)
- Marketing Department journals list committee (2014-2015)
- Marketing Department first-year doctoral students evaluation committee (2014-2015)

Stephen M. Ross School of Business, University of Michigan

- Organizer, First Marketing Modelers Summer Reading Group (2007)
- Grants Committee, Ross School Doctoral Students Forum (2007-2009)
- Facilities Co-Chair, Ross School Doctoral Students Forum (2005-2006)

## AWARDS AND GRANTS

Adobe Data Science Research Award, \$25,000, with Ron Berman (2017)

American Marketing Association, Advanced Research Techniques Forum Best Software Demo (2017)

LeBow College of Business Excellence in Research Award (2016)

LeBow College of Business Junior Teaching Award (2016)

American Marketing Association "4 Under 40" Emerging Leaders in Marketing Award (2013)

**INFORMS Young Researcher Connection (2012)** 

Fellow, American Marketing Association Sheth Doctoral Consortium, University of Missouri (2008)

Rackham Graduate School Pre-Doctoral Fellowship, 1 of 18 awarded across all doctoral programs in the social and behavioral sciences at the University of Michigan (2008-2009)

Gerald and Lillian Dykstra Fellowship for teaching excellence and academic performance (2007-2008)

National Science Foundation Small Grant for Exploratory Research / Grant Opportunity for Academic Liaison with Industry co-funded by the General Motors Vehicle Development Research Lab, \$60,000, with Fred Feinberg and Mark Beltramo (2005-2006) (with Fred Feinberg and Mark Beltramo

Phi Beta Kappa