Chris Volinsky

Data Scientist

50 Olmstead Rd
Morristown, NJ USA
1-973-216-6398
CTVisMe@gmail.com
linkedin:chris-volinsky

Summary

Data science innovator, team leader, mentor and educator. I'm a Data Science expert with 26 years industry experience solving real world problems using innovative analytic techniques, and embarking on a career as a data science educator. Led teams to create solutions for challenging business problems from large complex data sets. Expertise in modern analytic methods; machine learning, classification, clustering, forecasting, data visualization. Passionate lifelong learner and mentor. ivoting into education from a career as a data science leader and mentor. Leader of 7-person team that won the $1M Netflix Prize competition in 2009. Named AT&T Fellow in 2019.

Experience

2023–Present **Clinical Professor of Statistics and Data Science**, *NYU Stern School of Business*, New York, NY

Teaches undergraduate and graduate courses in Statistics and Data Science for the Technology, Operations, and Statistics Department.

2013–2023 **Assistant Vice President, Data Science & AI Research**, *AT&T Chief Data Office*, Bedminster, NJ

Manage a cross-disciplinary center of 40 data scientists. Responsible for developing and executing data science innovation, strategy, and application development covering statistics, machine learning, information visualization, and database technologies. Collaborate to develop data-driven strategic solutions across the enterprise: networking, customer care, entertainment, advertising, and business solutions. Interface with senior executives explaining strategy and communicating results.

2004–2013 **Executive Director, Statistics Research**, *AT&T Labs-Research*, Florham Park, NJ

Manage Statistics Research department consisting of 10 data scientists. Responsibilities include maintaining a statistical center of excellence providing analytic consulting for the rest of the company. Projects include analyzing cellular data networks, location based analytics, recommender systems, personalized advertising, anomaly and fraud detection, statistical visualization, analysis of social networks, and data mining methodology.

1997–2004 **Member of Technical Staff, Statistics Research**, *AT&T Labs-Research*, Florham Park, NJ

Individual contributor - work included detection of various types of telecommunications fraud, modelling the social network communications graph, and building innovative new data mining algorithms.

Teaching

Fall 2009/2011 **Adjunct Assistant Professor**, *Columbia University*

Professor for Masters' level Data Mining course for quantitative Ph.D. students from mulitple departments.

July 2009 **Instructor**, *Explorations in Statistics Research Summer Program*, University of California, Berkeley

Taught 2-day course in data mining, focusing on recommender systems.

Summer 2008 **Instructor**, *Massey University*, New Zealand

Taught Data Mining to grads and undergrads. Topics covered: data collection and quality, data presentation and visualization, classification, clustering, trees, neural networks, machine learning.

Education

1992–1997 **Ph.D. Statistics**, *University of Washington*, Seattle, WA, Thesis: Bayesian Model Averaging for Censored Survival Models. Advisor: Adrian E. Raftery

1988–1992 **B.A. Statistics and Mathematics (double major)**, *State University of New York at Buffalo*, Buffalo, NY

Service and Mentorship

2022-Present **Advisory Board Member, Modal Learning, Inc.**, Advisory role for company designing data science training modules

2022 **Mentor, SureStart**, Mentorship program for female/minority data scientists

2020-2022 **Mentor, Data Science For All**, Program for mentoring teams of under-represented data scientists as part of a training program

2020-Present **Board of Trustees Member: Morris Educational Foundation**, Local non-profit supporting education in the Morristown NJ area

2012–2016 **Business Intelligence and Analytics Advisory Board**, Stevens Institute of Technology

1999—2007 **Associate Editor**, *Journal of Computational and Graphical Statistics*

2007 **Ph.D. Committee**, Co-chair of dissertation committee for Shawndra Hill (Principal Scientist - Facebook)

2006 **Mentor, AT&T Labs Fellowship Program**, Jennifer Neville (Professor, Purdue University)

Publications

Selected publications: full list available at http://chrisvolinsky.academic.ws/publications.

Robert Margolies, Richard Becker, Simon Byers, Supratim Deb, Rittwik Jana, Simon Urbanek, and Chris Volinsky. Can you find me now? Evaluation of network-based localization in a 4G LTE network. In *IEEE INFOCOM 2017-IEEE Conference on Computer Communications*, pages 1–9. IEEE, 2017.

Jean-Francois Paiement, M. Yin, Jeff Pang, Colin Goodall, Ann Skudlark, Chris Volinsky, and A. Pozdnoukhov. Data analytics for urban mobility modeling and traffic control. In *Bloomberg Data For Good Exchange*, 2015.

Richard Becker, Ramón Cáceres, Karrie Hanson, Sibren Isaacman, Ji Meng Loh, Margaret Martonosi, James Rowland, Simon Urbanek, Alexander Varshavsky, and Chris Volinsky. Human mobility characterization from cellular network data. *Commun. ACM*, 56(1):74–82, January 2013.

Richard A Becker, Chris Volinsky, and Allan R Wilks. Fraud detection in telecommunications: History and lessons learned. *Technometrics*, 52(1):20–33, 2010.

Yehuda Koren, Robert Bell, and Chris Volinsky. Matrix factorization techniques for recommender systems. *Computer*, 42(8):30–37, 2009.

Emden Gansner, Yifan Hu, Stephen Kobourov, and Chris Volinsky. Putting recommendations on the map: Visualizing clusters and relations. In *Proceedings of the third ACM conference on Recommender systems*, pages 345–348. ACM, 2009.

Yifan Hu, Yehuda Koren, and Chris Volinsky. Collaborative filtering for implicit feedback datasets. In *IEEE International Conference on Data Mining (ICDM 2008)*, 2008.

Shawndra Hill, Foster Provost, and Chris Volinsky. Network-based marketing: Identifying likely adopters via consumer networks. *Statistical Science*, 21:256–276, 2006.

Chris T Volinsky and Adrian E Raftery. Bayesian information criterion for censored survival models. *Biometrics*, 56(1):256–262, 2000.

Jennifer A Hoeting, David Madigan, Adrian E Raftery, and Chris T Volinsky. Bayesian model averaging: A tutorial. *Statistical science*, pages 382–401, 1999.

Chris T. Volinsky, David Madigan, Adrian E. Raftery, and Richard A. Kronmal. Bayesian Model Averaging in proportional hazard models: Assessing the risk of a stroke. *Applied Statistics*, 46(3):443–448, 1997.

Awards and Prizes

2019 **AT&T Fellow**, Recognized for outstanding career contributions to data science and AI

2017 **ICDM 10-Year Highest-Impact Paper Award**, Given to ICDM paper from 2007 with highest impact after 10 years, Joint with Yifan Hu and Yehuda Koren

2011 **Jack Youden Prize**, Given to best expository paper appearing in the previous year's Technometrics, Joint with Rick Becker and Allan Wilks

2010 **AT&T Science and Technology Award** , For notable achievements in statistical analysis

2007–2009 **Netflix Prize**, Winner of US$1M Netflix Prize competition (along with 6 colleagues). Prize awarded to the team with the best recommender system in public Netflix competition. (https://en.wikipedia.org/wiki/Netflix_Prize)

2009 **Informs Design Science Award**, Award celebrating excellence and innovation in Info Tech algorithms, Joint with Delassandro, Macskassy, Hill, Provost, and Zhang

1997 **ZW Birnbaum Award, University of Washington Statistics Department**, Annual award given to the graduate student with the best General Exam

1994 **Teaching Award, University of Washington Statistics Department**, Annual award given to the best teacher among the graduate students.

Selected Patents (of 15 - full list upon request)

US 11,350,174 Method And Apparatus To Monitor Account Credential Sharing In Communication Services

US 11,190,843 Content Recommendation Techniques With Reduced Habit Bias Effects

US 10,735,811 System For Content Curation With User Context And Content Leverage

US 9,946,975 Method And Apparatus To Identify Influencers

US 8,970,593 Visualization and Representation of Data Clusters and Relations

US 6,539,391 Method and System for Squashing a Large Data Set.

Media

2020 **Data Science Leaders Podcast**, *How Computer Science & Statistics Fundamentals Can Advance Data Science*, Online at https://tinyurl.com/yc6bdzr6

2017 **Datacamp Podcast**, *"How Data Science is Impacting Telecommunications Networks"*, Online at https://www.datacamp.com/community/podcast/data-science-telecommunications

2017 **Why Oh Why Podcast**, *"Hotter on Bumble"*, Online at http://www.whyohwhyradio.com/hotter-on-bumble-part-2/ (Starting at 10:30)

2012 **Newark Star Ledger**, *"Why AT&T is using your cell phone to watch your movements"*, Online at http://bit.ly/RuvCIM

2008 **New York Times Magazine**, *"If You Liked This, You're Sure to Love That"*, November 28, 2008, Online version available at www.tinyurl.com/5byw73. Accompanying video segment available at https://nyti.ms/2MCeets