

Peter DeWan, PhD

Employment

Brookings Institution (Current)

Non-Resident Fellow

Advise on quantitative methods

Network analysis of industrial and labor market spaces

Workforce of the Future Task Force Leader

88 Analytics (2017 – Current)

Principal

Advise scientific and medical teams on quantitative methods

Develop artificial intelligence methods for disease prediction in oncology

Geospatial analysis of patient flows for facility siting

Analyze influence and diffusion for AI-enabled imaging in medicine

Massachusetts Institute of Technology (2016 – 2019)

Visiting Researcher

Developing methods for identifying influence in online medical discussions

Developing methods for identifying, tracking and predicting meme diffusion in healthcare conversations

Decision Resources (2015 – 2017)

Vice President, Research & Development

Developed new methods of inferring institutional control over physician behavior

Developed new methods of machine learning to identify undiagnosed patients

Managed budget, sales and all projects and customer interactions for network analytics

Lead scientist and methodologist for the company

Activate Networks (2009 - 2015)

Company acquired in March 2015 by Decision Resources

Founder, Chief Scientific Officer and Vice President, Analytics

Developed innovative approaches to inferring social networks from a wide variety of data sources

Developed new methods for measuring and predicting influence patterns and behavior propagation in networks

Received multiple rounds of multi-million dollar venture investments

Managed delivery of all customer projects

Supervised research and development

Harvard Institute for Quantitative Social Science (2009 – 2011)

Fellow

Developed methods for inferring social networks from various data forms

Developed methods for finding influential individuals in networks

Developed targeting methods for maximizing behavior change in populations

Franck Advisors (2006 – 2009)

Associate Consultant

Developed cost models for best practices in consumer products

Consultant

Managed multiple teams of customer and consultant assets

Led cost analysis and negotiations for multi-million dollar contracts

Harvard University (2002 – 2005)

Instructor

Taught courses on sociological theory, statistical analysis and qualitative methods

Developed and implemented new curriculum for teacher training across multiple departments

Research Associate

Developed data and built interactive mapping software of Muslim minorities in Massachusetts

Researched and wrote major sections of “Encyclopedia of Islam in America”

Researcher

Developed and published on new methods for handling confounder bias in high collinearity models

European Union Monitoring Center on Racism and Xenophobia (2003-2006)

Author & Editor, “Muslims in the European Union: Discrimination & Islamophobia”

Wrote major sections of two reports on labor, housing and education conditions for Muslim minorities in the European Union

Discovered, coordinated and analyzed data from twelve distinct national-level data environments

Editor, www.euro-islam.info

Managed website construction and maintenance

Researched, translated and analyzed news and press releases in five languages

Princeton Consultants (1999 – 2001)

Associate

Managed opening of new office in New York City

Application development in HTML and LotusScript

New York City Department of Education (1998 – 1999)

Secondary School Teacher, TYWLS of Harlem

Economics, World History, American History

Education

Harvard University (2001 – 2008)

PhD, Sociology

Dissertation “The Health Effects of Relative Status”

Columbia University (1995 – 1998)

BA, Sociology, Summa Cum Laude, Phi Beta Kappa

Departmental award for best graduating student in sociology

Minor Concentration in Education

Publications

Dewan, et al. (2019 Under Review) Predicting Neutropenia in Breast Cancer Patients Using Artificial Intelligence. American Society of Cancer Oncologists.

Matthews LJ, DeWan P, Rula EY (2013) Methods for Inferring Health-Related Social Networks among Coworkers from Online Communication Patterns. PLoS ONE 8(2): e55234.
<https://doi.org/10.1371/journal.pone.0055234>

DeWan, Peter. Contributor (2007). Encyclopedia of Islam in America.

DeWan, Peter (2006). Muslims in the European Union: Discrimination & Islamophobia. EUMC.

University Courses Taught

Quantitative Reasoning in the Social Sciences. Harvard University (2006)

Classical Social Theory. Harvard University (2005)

Contemporary Social Theory. Harvard University (2005)

Graduate Teaching Seminar. Harvard University (2004 – 2006)

Research in Immigrant Populations. Harvard University (2007)

Selected Presentations

Commercial Applications of Network Science. Yale University (2017)

Similarity Indices, Clustering, and Sources of Influence. European Pharmaceutical Market Research Association (2016)

Integrated Networks and Expert Influence. Pharmaceutical Market Science Association (2015)

Inferring Control in The Treatment Team. American Marketing Association (2012)

Measuring Influence in Social Networks. Bentley University (2011)

Hierarchical Network Backbone Method. Harvard University (2010)

Connected Consumer: Influence in Social Networks. Massachusetts Institute of Technology (2009)

Abstracting Physician Networks. Network Science Conference (2009)

Ideological Components of Immigrant Integration. University of Massachusetts (2008)

Sources of Religious Radicalism. Association for the Sociology of Religion (2007)

Other skills and experience

Harvard Invention – “Methods for Inferring Social Networks from Administrative Data”

Member of several dissertation committees

Reviewer for academic journals

National Science Foundation reviewer

Derek Bok Award for Excellence in Education

Contributor to multiple methods patents

Expert in statistical methods

Programming in Stata & R

Licensed teacher

Licensed commercial radio station operator