CURRICULUM VITAE

David Kane

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EDUCATION

Ph.D. Political Economy and Government, Harvard University, 1998.

B.A. Philosophy and Economics, Williams College, 1988.

ACADEMIC APPOINTMENTS

Researcher, Institute for Globally Distributed Open Research and Education, May, 2023 -- present.

- Taught "Kane's Free High School Data Science Bootcamp," a six week course, to more than 100 students since June 2021.
- Author of several R packages related to teaching, especially <u>tutorial.helpers</u> and <u>r4ds.tutorials</u>.

Preceptor in Statistical Methods and Mathematics, Department of Government, Harvard University, July 2018 -- June 2021.

- Taught first and second semester courses in data science to almost 500 students.
- See "Kill The Math and Let the Introductory Course Be Born" and "Creating Community in a Data Science Classroom" for course philosophy.
- Four-time winner of a Derek Bok Center Certificate for Teaching Excellence.
- Awarded a Special Commendation for Extraordinary Teaching in Extraordinary Times.
- Author of <u>Preceptor's Primer for Bayesian Data Science</u>, and the associated collection of tutorials and data sets.

Teaching Assistant, Harvard University, 2018. Taught "EC 970: Elite Education."

Professor of the Practice, Middlebury College, 2016. Taught "Quantitative Finance."

Adjunct Instructor, Williams College, 2009, 2010, 2015. Taught various statistics and finance classes, including "Quantitative Equity Analysis."

Fellow, The Institute for Quantitative Social Science, Harvard University, 2005 - 2012.

Lecturer, Harvard University, 2002 - 2003. Taught "Gov 1000: Introduction to Quantitative Methods" in the Government Department.

WORK EXPERIENCE

Co-Founder of Strand, 2018 - 2020.

- Co-author of <u>strand</u>, an R package for performing discrete (share-level) simulations of investment strategies. Simulated portfolios optimize exposure to an input signal subject to constraints such as position size and factor exposure.
- Strand the company sought to leverage strand the package into a FinTech start-up.
- Fund-raising failed during the spring/summer of 2020. Company wound down.

Managing Director, Hutchin Hill Capital Management, 2012 - 2018.

- Portfolio manager of multi-billion dollar GMV quantitative equity and credit default swap portfolios.
- Managed a team of 5 full-time researchers and up to 8 interns during the summer.
- Performed extensive research into the use of deep learning to forecast equity returns and to manage large portfolios.

Director of Long/Short Strategies, Acadian Asset Management, 2011 - 2012.

Chief Executive Officer, Kane Capital Management, 2004 - 2010.

Portfolio Manager, Geode Capital Management, 2001 - 2004.

Statistician, Numeric Investors, 1997 - 2001.

Officer, United States Marine Corps, 1988 - 1991.

PROFESSIONAL AFFILIATIONS

Member, American Statistical Association

PUBLICATIONS

M Schweinsberg, M Feldman, ..., **D Kane,** ..., M Schulte-Mecklenbeck. "Same data, different conclusions: Radical dispersion in empirical results when independent analysts operationalize and test the same hypothesis." *Organizational Behavior and Human Decision Processes*, Volume 165, July 2021, pages 228-249, doi.org/10.1016/j.obhdp.2021.02.003

Kane, David D. "Mortality in Puerto Rico after Hurricane Maria." *The New England Journal of Medicine*, vol. 379, no. 17, 2018, p. e30.

Andy Yao and **David Kane**, (2017). walkr: MCMC Sampling from Non-Negative Convex Polytopes. *Journal of Open Source Software*, 2(11), 61, doi:10.21105/joss.00061.

Yang Lu and **David Kane**, "Performance Attribution for Equity Portfolios," *The R Journal*, Volume 5, Number 2, pages 53–62, December 2013.

Brian C. W. Kot, Michael T. C. Ying, Fiona M. Brook, Reimi E. Kinoshita, **David Kane**, and Winson K. Chan, "Sonographic evaluation of thyroid morphology during different reproductive events in female Indo-Pacific bottlenose dolphins, *Tursiops aduncus*," *Marine Mammal Science*, Volume 28, Issue 4, pages 733–750, October 2012.

David Kane and Andrew Liu and Khanh Nguyen, "Analyzing an Electronic Limit Order Book," *The R Journal*, Volume 3, Number 1, pages 64–68, June 2011.

David Kane and Joseph D. Masters, "Open Source Finance," *The Journal of Investing*, Spring 2009, Vol. 17, No. 1, pp. 92–96.

J. Enos, **D. Kane**, A. Narayan, A. Schwartz, D. Suo, and L. Zhao. "Trade Costs." *R News*, 8(1):10–13, May 2008.

K. Campbell, J. Enos, D. Gerlanc, and **D. Kane**. "Backtests." *R News*, 7(1):36–41, April 2007.

J. Enos and **D. Kane**. "Analyzing equity portfolios in R." R News, 6(2):13–19, May 2006.

Kane, David. "Computer Simulation." *Handbook of Research Methods in Public Administration.* 1st. Gerald J. Miller, Marcia L. Whicker. New York: Marcel Dekker, 1999. 511–535.

Timothy F. Brewer, S. Jody Hermann, Graham A. Colditz, Mary E. Wilson, Kenneth Auerbach, **David Kane**, and Harvey V. Fineberg. "Evaluation of Tuberculosis Control Policies Using Computer Simulation." *The Journal of the American Medical Association*. 18 Dec. 1996.

Kane, David. "Local hillclimbing on an economic landscape." In Evolutionary Programming, pp. 9–15. 1996.

UNPUBLISHED

David Kane, "Creating Community in a Data Science Classroom," 2023.

David Kane, "Kill The Math and Let the Introductory Course Be Born," 2020.

Kevin Bartz and David Kane, "Matching Portfolios."

SOFTWARE PROJECTS

David Kane, <u>tutorial.helpers</u>. Helper functions for creating, editing, and testing tutorials created with the 'learnr' package. Provides a simple method for allowing students to download their answers to tutorial questions. For examples of its use, see the <u>r4ds.tutorials</u> and <u>primer.tutorials</u> packages.

Jeff Enos, **David Kane**, Ben Czekanski, Robert Hoover, Jack Luby, and Nils Wallin. <u>strand</u>. Provides a framework for performing discrete (share-level) simulations of investment strategies. Simulated portfolios optimize exposure to an input signal subject to constraints such as position size and factor exposure.

Yang Lu and **David Kane**. <u>pa</u>. A package that provides tools for conducting performance attribution for equity portfolios.

Jeff Enos, **David Kane**, Daniel Gerlanc, and Kyle Campbell. <u>portfolio</u>. Classes for analyzing and implementing equity portfolios, including routines for generating tradelists and calculating exposures to user-specified risk factors.

Jeff Enos and **David Kane**. <u>backtest</u>. Provides facilities for exploring portfolio-based conjectures about financial instruments (stocks, bonds, swaps, options, et cetera).

CONFERENCE PRESENTATIONS

Using the Dataverse for Homework Assignments: Successes and Failures. Presentation to the <u>Dataverse Community Meeting 2019</u>. 19 June 2019.

A Self-paced Guide for Learning R. Presentation to the Boston R Users Group. 25 May 2010.

Matching Portfolios. Keynote speech at <u>R/Finance 2009</u>: Applied Finance with R conference. 24 April 2009.

<u>Counting the Dead in Iraq</u>. A panel at the Joint Statistical Meeting. Organizer and discussant. 6 August 2008.

<u>Scepticism About The Lancet Surveys on Iraqi Mortality</u>. A paper presented at the Joint Statistical Meetings. 30 July 2007.

OTHER WRITINGS

Kane, David. "The Case for Zoom Commencement," The Harvard Crimson, 1 May 2020.

Kane, David. Remembrances for the three Williams alumni killed on September 11, 2001: "Only for a Moment," "There All the Time," and "What Should I do?"

Kane, David. "More on Normalization," The Williams Magazine, Fall, 2018.

Kane, David. Essays on 1st Lt Nate Krissoff '03: "A Death in Iraq," "Ephs Who Have Gone Before," and "A Deafening Silence."

Kane, David. Advice essays: "<u>Do Not Go to Law School</u>," "<u>Do Not Go To Graduate School</u>," "<u>How to Hire Conservative/Republican/Libertarian Faculty</u>", "<u>How to Pick a Husband</u>," "<u>EphBlog's Guide to Your Career</u>," "<u>How To Lobby Alumni</u>," and "<u>Fall in Love</u>."

Kane, David. "The Best College in the World," *The Williams Record*, 20 September 2017. Extended commentary: 1, 2, 3, 4 and 5.

Kane, David. "Look Both Ways," The Williams Record, 7 December 2016.

Kane, David. Miscellaneous essays: "Remember the Tablecloth Colors," "Make Class/Professor Evaluations Available," "Four Letter Word," "The Ghost of EphBlog Past," "The Ghost of EphBlog Present," and "The Ghost of EphBlog Future."

Kane, David. "Fixing NESCAC Athletics," September 2015

Kane, David. "Expanding First Days," The Williams Record, 6 May 2015.

Kane, David. Admissions essays: "The Parable of the Privilege Pill," "Guide to Athletic Admissions," "Legacy Admissions Play No Meaningful Role at Elite Colleges," "Choose Williams over Harvard," and "How Admissions Works at Williams."

Kane, David. "Creating a Finance Major," The Williams Record, 21 January 2015.

Kane, David. "Ephs Can Choose," The Williams Record, 27 February 2008.

David Kane and Jeff Enos, "The Black Swan in Quantitative Equity," 20 January 2008.

Kane, David. "No More Lectures," *The Williams Record*, 15 November 2006.

Kane, David D. "<u>File No. S7-03-06</u>," U.S. Securities and Exchange Commission Proposed Rules, 14 April 2006.

Kane, David. "A Shameful Quota," The Williams Record, 12 April 2006.

Kane, David. "Lack of Data Inexcusable," The Williams Record, 22 February 2005.

Kane, David. "The Need for an Eph Style Guide," The Williams Record, 28 September 2004.

Kane, David. "E Williams Amigeri," Williams Alumni Review, Fall 1995.