GRAY CALHOUN

Resume, July 15, 2021

(858) 361-4248
http://gray.clhn.org
linkedin.com/in/grayclhn
gray@clhn.org

RECENT WORK EXPERIENCE

2020–present. Principal Economist at Amazon
- Design major new machine learning products to support Private Brands operations and expansion.
- Support several small science and engineering teams (5–15 people each) developing machine and reinforcement learning products (e.g. providing technical review and sign-off on major scientific decisions; coaching managers, scientists, and engineers on appropriate modeling strategies, project roadmap and risk mitigation, hiring and developing scientists, and stakeholder engagement; mentoring junior and senior scientists).

2017–2020. Senior Economist at Amazon
- Led small teams of 3-5 scientists to develop econometric models and machine and reinforcement learning algorithms to solve ambiguous, time-sensitive, and high-impact business problems in multiple domains (logistics, financial forecasting, macroeconomic shocks, and advertising, among others).
- Collaborate with engineering and product teams to develop and launch those systems.
- Communicate complex economic analysis and scientific results to business partners and leadership to support strategic decisions at VP, SVP, and CEO level (ongoing).
- Coordinator for economist technical recruiting – revised company-wide hiring guidelines and interview structure; onboarded & trained new interviewers; conducted 70+ interviews.
- Organized company-wide scientific programs – technical review; internal conferences and seminars; educational lectures and training; etc. (ongoing).

2009–2017. Assistant Professor of Economics, Iowa State University
- Published research in econometrics, primarily time series, forecasting, and the bootstrap; with secondary interests in macroecnomics and data visualization.
- Taught PhD Econometrics (first year introductory course and a time-series elective) and undergraduate macroeconomics (lectures up to 350 students); advised graduate students in Economics and Statistics departments.
- See http://gray.clhn.org/dl/calhoun-cv.pdf for complete academic CV.

EDUCATION

2009. PhD Economics. University of California, San Diego
2006. MS Statistics. University of California, San Diego
2001. BA Mathematics. Tufts University

PEER-REVIEWED PUBLICATIONS

- Block bootstrap consistency under weak assumptions. *Econometric Theory*, 34(6):1383–1406, 2018
- Integrated Assessment Models of the Food, Energy, and Water (FEW) Nexus: A Review and Research Needs (with Catherine L. Kling, Raymond W. Arritt, and David A. Keiser). *Annual Review of Resource Economics*, 9:143–163, 2017
- Bootstrap Confidence Intervals for Sharp Regression Discontinuity Designs (with Otávio Bartalotti and Yang He). *Advances in Econometrics*, 38:421–453, 2016
- Hypothesis testing for linear regression when k/n is large. *Journal of Econometrics*, 165(2):163–174, 2011

OTHER

- Programming skills: R, Julia, SQL, Python, Matlab, and other statistical and scientific programming languages.
- See https://github.com/grayclhn for code repositories and artifacts (pre-Amazon).
- See https://scholar.google.com/citations?user=OS8d9ycAAAAJ for additional research papers (pre-Amazon).