Strom Borman **Senior Research Scientist**

ABOUT

Lead a team of scientists using machine learning and control theory to develop production algorithms for optimal pacing and bidding strategies in real-time ad auctions.

My math research background allows me to quickly learn and synthesize complex and domain-specific knowledge so that ML/AI tools can be used to craft high-impact solutions. My experience as a professor enables me to communicate these technical solutions effectively across diverse stakeholders and partners.

WORK HISTORY

Yahoo, Senior Research Scientist, 12/2023 – Present.

Yahoo, Research Scientist, 7/2022 – 12/2023.

- Implemented improvements that are behind an 8-figure increase in annual margins.
- Science lead for many projects (a sample):
  - Budget splitting based A/B testing infrastructure.
  - Simplify legacy java pacing algorithm into a modern python implementation.
  - Metrics for supply scoring: When can bid requests be discarded early.
  - Pacing initialization: Model what pacing signals to use in a cold-start.
  - Noised bidding strategies: To handle market discontinuities in signal to spend.

ACADEMIC HISTORY

University of Illinois Urbana-Champaign, Assistant Professor, 8/2016 – 8/2021.

- Researched what is now known as the Borman-Sheridan class in symplectic geometry.
- Consistently recognized as an excellent teacher among all faculty at the university.

Stanford University, Postdoctoral Fellow, 8/2013 – 8/2016.

- Solved major long (60 years) open problem in high dimensional contact topology.

Institute for Advanced Study, Member, 8/2014 – 8/2015.

RESEARCH SUMMARY

Published 12 papers (600+ citations) in geometry and probability in top math journals.
20+ keynote speeches at international conferences (e.g. Germany, France, UK).
20+ research lectures at elite universities (e.g. MIT, Columbia, Berkeley, ETH Zürich).
ML Conference Papers: ICLR 2024

EDUCATION

University of Chicago, Ph.D., Mathematics, 2013.
National Science Foundation Postdoctoral Research Fellowship

Reed College, B.A., Mathematics, 2007.
Phi Beta Kappa, Barry M. Goldwater Scholarship

CONTACT

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CITIZENSHIP

USA