Charles Zhang

PhD Candidate · Stanford GSB

San Mateo, CA 94402
✉ cyzhang@stanford.edu | ⌂ www.cyzhang.com

Education

Stanford University, Graduate School of Business   *Stanford, CA*
PhD Marketing (Quantitative)   *2016 - present*
- *Advisor:* Navdeep Sahni
- *Committee:* James Lattin, Harikesh Nair, Peter Reiss

Stanford University   *Stanford, CA*
MS Statistics   *2014 - 2015*

University of Chicago   *Chicago, IL*
AB Economics   *2009 - 2012*

Professional Experience

2015-2016   **Data Scientist**, AdRoll
2012-2014   **Research Professional**, Coase-Sandor Institute for Law and Economics, University of Chicago Law School

Working Papers

Working Smarter, Not Harder: The Value of Marketing Information in Enterprise Selling (Job Market Paper)
   Zhang,Charles.
   (Work-in-progress.)
   Abstract What is the value of providing marketing information to enterprise salespeople? To what extent can providing marketing information change which customers salespeople try to sell to and, ultimately, how much salespeople can sell? I ask this question in the context of a new technology that allows salespeople to directly observe when potential customers ("prospects") visit the selling firm's website. I analyze a novel dataset of micro-data that includes one year of selling activities from a sample of 46 salespeople from an enterprise technology firm. I find evidence consistent with (a) website visits being informative of a prospect's probability of becoming a selling opportunity and (b) salespeople re-allocating efforts towards prospects that visit the website. To quantify the overall value of this information, I propose a structural model that explains how salespeople allocate their communication efforts under uncertainty. In this model, marketing information can reduce uncertainty and allows the salesperson to allocate more effectively. I estimate this model and will quantify the value of information by simulating the counter-factual setting where information about prospect's website visits is hidden from salespeople.

Are Consumers Averse to Sponsored Messages? The Role of Search Advertising in Information Discovery
   Sahni, Navdeep, and **Zhang, Charles**.
   (dx.doi.org/10.2139/ssrn.3441786)
   We analyze a large-scale randomized field experiment in which a search engine varied the prominence of search ads for 3.3 million US users: one group of users saw the status quo, while the other saw a lower level of advertising (with prominence of search ads decreased). Revealed preference data reject that users are, overall, averse to search advertising targeted to them across a diverse set of searches. At the margin, users prefer the search engine with the higher level of advertising. On the supply side, newer websites are more likely to advertise. Going from the lower to the higher level of advertising increases traffic to newer websites, with the newest decile of websites gaining traffic by 10Taken together, patterns in our data are consistent with an equilibrium in which advertising compensates for important information gaps in organic listings: it conveys relevant new information, which is hard for the search engine to gather, and therefore missed by the organic listings algorithm. Viewing search ads, at the margin we study, makes consumers better off on average.

Presentations

June 2019. *Advertising and Search Engine Usage: Do Consumers Prefer Less Advertising?*. INFORMS Marketing Science. Rome, Italy. (Presenting Author)

Teaching Experience

Sum. 2020   **Research Programming Bootcamp**, Instructor

Awards, Fellowships, & Service

AWARDS

2018   **Community Impact Award**, Stanford Alumni Association

FELLOWSHIPS

2020   **The MBA Class of 1980 Doctoral Fellowship**, Stanford GSB
2019   **Jere J. Santry Jr. Fellowship**, Stanford GSB
2018   **The Kurt and Molly Hauser Fellowship**, Stanford GSB
2017   **Theodore Sutter Fellowship**, Stanford GSB
2016   **The Hank McKinnell PhD Fellowship**, Stanford GSB

SERVICE

2016-2017   **Vice President**, GSB PhD Association

References

Navdeep Sahni
NSAHNI1@STANFORD.EDU

Harikesh Nair
hnair@STANFORD.EDU

Peter Reiss
PREISS@STANFORD.EDU