Blake Riley

CONTACT University of Illinois Information Department of Economics http://blakejriley.com

214 David Kinley Hall 1407 W. Gregory Dr. Urbana, IL 61801

EDUCATION Ph.D. in Economics, University of Illinois 2009-2016 (expected)

2012-2014

Advisor: Steven Williams

B.A. in Economics, B.S. in Mathematics, Arizona State University 2005-2009

blake.j.riley@gmail.com

FIELDS Microeconomic theory, game theory, mechanism design, market design,

mathematical and computational economics.

RESEARCH PAPERS Mechanisms for Making Accurate Decisions in Biased Crowds (job market paper)

> This paper studies procedures for identifying the true answer to a binary question using the opinions of potentially-biased individuals. It's common and natural to side with the majority opinion, but the majority may make the wrong choice when the agents are biased. Taking majority rule as a baseline, I study peer-prediction decision rules, which ask agents to predict the opinions of others in addition to providing their own. This extra information enables us to potentially recognize the correct answer even when the majority is wrong.

> I first show that peer-prediction rules cannot be more accurate than the majority when we require them to satisfy the same symmetry conditions as majority rule and to be incentive-compatible for agents who intend to push the final decision towards their own opinion. Realistically though, not all agents distort their information strategically. I provide a simple decision rule based on the median agent's prediction that matches majority rule when all agents are strategic and makes more accurate decisions than majority rule when some agents are honest.

Minimum Truth Serums with Optional Predictions

Properly designed rewards can give survey participants an extra incentive to tell the truth. Here I provide a reward scheme based on minimal assumptions relative to existing methods while also simplifying the amount of information collected from participants.

Uncoordinated Matching Markets, with Juan Fung (in progress)

Starting with Gale and Shapley (1962), centralized systems for matching two groups of agents into stable pairs have been thoroughly studied. However, the baseline alternative of agents searching and proposing independently without any coordination has received comparatively little attention. Via simulation, we show typical matches "on the road to stability" tend to be more egalitarian.

Awards and Summer Research Fellowship RECOGNITION Future of Humanity Institute Thesis Proposal Award

2013 Department Fellowship 2009-2011 National Merit Finalist Scholarship 2005-2009

TEACHING Experience Economics 500: Microeconomic Theory I

Teaching Assistant Fall 2014–2015

Graduate Student Math Camp

Instructor August-September 2014

Economics 502: Microeconomic Theory II

Teaching Assistant Spring 2012–2015

Economics 202: Economic Statistics

Teaching Assistant Fall 2013

Economics 102: Microeconomic Principles

InstructorFall 2011–2012Teaching AssistantSpring 2011

Professional Activities Presentations

ACM Conference on Economics and Computation, Workshop on June 2014

Social Computing and User Generated Content (peer-reviewed)

Conference on Economic Design July 2013

Communications Seminar, Coordinated Science Lab, UIUC (invited)

April 2013

Missouri Valley Economic Association Conference

October 2012

Work Experience

Joint Legislative Budget Committee, Phoenix, AZ

Staff Intern 2007–2009

- Independently analyzed agency budget requests and legislation.

- Assisted in modeling Arizona Health Care Cost Containment System

enrollment and expenditures.

OTHER INFO

Programming Language Experience R, Julia, Scala, Python, Java

American Citizenship