

Young Wu

Business Address

Department of Economics
University of Toronto
150 St. George Street
Toronto, ON M5S 3G7
Phone: (647) 876-0999

Home Address

Unit 910, 426 University Avenue
Toronto, ON M5G 1S9
Canada

Email: yyang.wu@mail.utoronto.ca

Web: <http://individual.utoronto.ca/youngwu>

Citizenship	Canadian
Research Interests	Microeconomic Theory Mechanism Design
Teaching Interests	Microeconomic Theory Game Theory

Education

2018	PhD, Economics, University of Toronto, 2012-
	Dissertation: Dynamic Mechanism Design without Transfers Committee: Marcin Peski, Colin Stewart, Xianwen Shi
2012	MA, Economics, University of Toronto, 2011-2012
2011	BA, Mathematics, University of Waterloo, 2007-2011

Awards

Award for Excellence in Teaching by Teaching Assistants, 2014, 2016
Ontario Graduate Scholarship, 2011-2012
NSERC Undergraduate Student Research Award, 2010

Research Papers

Design of Committee Search, job market paper, 2017

Mechanism Design for Stopping Problems with Two Actions, submitted, 2017

School Choice with Observable Characteristics, in progress

Teaching and Research Experience

2015-2016: Course Instructor

- Microeconomic Theory (ECO206), undergraduate

2011-2017: Teaching Assistant

- Department of Economics, University of Toronto
 - Microeconomic Theory (ECO2020 and 2030), PhD, 2015-2016
 - Game Theory (ECO326), undergraduate, 2014-2017
 - Corporate Finance (ECO358), undergraduate, 2017
 - Microeconomic Theory (ECO200, 204 and 206), 2012-2014, 2016-2017
 - Macroeconomic Theory (ECO208 and 362), undergraduate, 2012
 - Introduction to Economics (ECO100), undergraduate, 2011-2013
- Department of Computer Science, University of Toronto
 - Algorithmic Game Theory (CSC304), undergraduate, 2016
 - Mathematical Expression and Reasoning (CSC165), undergraduate, 2015
- Department of Mathematics, University of Waterloo
 - Calculus (MATH137 and 138), undergraduate, 2008-2011
 - Linear algebra (MATH135, 136 and 235), undergraduate, 2008-2011

2010-2016: Research Assistant

- Professor Marcin Peski, Department of Economics, University of Toronto, 2014-2016
- Professor Colin Stewart, Department of Economics, University of Toronto, 2015-2016
- Professor Francis Poulin, Department of Mathematics, University of Waterloo, 2010

References

Professor Marcin Peski
Department of Economics
University of Toronto
150 St. George Street
Toronto, ON M5S 3G7

phone: (416) 978-1970
email: mpeski@gmail.com

Professor Colin Stewart
Department of Economics
University of Toronto
150 St. George Street
Toronto, ON M5S 3G7

phone: (416) 946-3519
email: colinbstewart@gmail.com

Professor Xianwen Shi
Department of Economics
University of Toronto
150 St. George Street
Toronto, ON M5S 3G7

phone: (416) 978-5105
email: xianwen.shi@gmail.com

Dissertation Abstract

Dynamic Mechanism Design without Transfers

In chapter 1, titled “Design of Committee Search,” I apply a mechanism design approach to committee search problems, such as hiring by a department or a couple's search for a house. A special class of simple dynamic decisions rules have agents submit in each period one of three votes: veto, approve, or recommend; the current option is adopted whenever no agent vetoes and at least one agent recommends. I show that every implementable payoff can be attained by randomizing among these simple rules. This result dramatically simplifies the design problem.

In chapter 2, titled “School Choice with Observable Characteristics,” I study a school choice problem where students have observable characteristics that are correlated with their preferences. For example, one such characteristic may be the location of a student's home, which is correlated with preferences if students tend to prefer nearby schools. I consider mechanisms that are envy-free, efficient, and treat students with the same observable characteristics equally. I show that the welfare-maximizing mechanism in this class is a modified probabilistic serial mechanism with capacities. These capacities specify the maximum number of students with given characteristics that can be admitted into each school.

In chapter 3, titled “Mechanism Design for Stopping Problems with Two Actions,” I analyse a class of dynamic mechanism design problems in which a single agent privately observes a time-varying state, chooses a stopping time, and upon stopping, chooses between two actions. The principal designs transfers that depend only on the time the agent stops and on the alternative the agent chooses. The analysis provides necessary and sufficient conditions for implementability in this environment. In particular, I show that any stopping rule in which the agent stops the first time the state falls outside of an interval in the state space can be implemented if and only if a pair of monotonicity conditions is satisfied.