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Introduction

I am a rising third year PhD student at Duke Economics. My primary focus is on Industrial Organization, and I plan to have a minor in Finance. During my second year, I enrolled in various courses related to IO (and Finance) to get acquainted to structural methods used in these fields. Additionally, I took a number of courses in Econometrics, such as machine learning and quasi-experimental methods, driven by my broad interest in reduced form methods and applied microeconomics topics. The members of my committee will be Daniel Yi Xu, Allan Collard-Wexler, and James W Roberts.

Research Interests

Fields of Interest: Industrial Organization, Finance

My main area of interest lies in innovation and technology diffusion. I find myself intrigued by several questions related to these topics, such as the origin and dissemination of new ideas and their impact on firm performance and growth. I am also interested in exploring the roles of competition and organizational structure, and identifying who is best equipped to adapt and gain a competitive edge. Particularly, I aim to understand the economic determinants and consequences of technological change, as well as its links to firm strategy, market structure, and government policy.

Research Projects in process

Title: The AlphaGo effect: An Investigation of Innovation in Competitive Go

Description: This is a research project focused on a specific episode of AI development, offering a unique opportunity to study technology adoption at the individual level within a competitive context. Specifically, I am examining the introduction of the AlphaGo software into the world of professional Go, a classic board game. This AI software not only provided innovative strategies to players but also encouraged them to adapt and incorporate the new technology into their training.

After gathering highly detailed data on Go matches, I measured human decision quality by comparing the moves made by each player to the algorithm's prediction on optimal moves. Using this measurement, I intend to analyze how different players

adapted to this technology. Preliminary results indicate significant heterogeneous impacts, including decreased first-mover advantage and win rate volatility in the early phase of the game. Ultimately, my goal is to embed the analysis of this episode into a framework that could be broadly applied to other contexts, such as competitiveness in labor markets.