Helene Strandt

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Academic History

LMU Munich, Doctoral Candidate **since 02/2021**

- Research Interests: Organizational Economics, Social Networks, Skill Acquisition

LMU Munich, M.Sc. Economics, Deutschlandstipendium, 1.1 **09/2018 - 01/2021**

- Specialization: Applied Econometrics
- Relevant Coursework: Methods and Tools for Data Science, Computational Methods in Economics, Spatial Data in Economics, Labor Economics, Econometrics

University of Mannheim, B.Sc. Economics, 1.6 **09/2014 - 09/2017**

- Relevant Coursework: Econometrics, Advanced Analysis in Economics, Game Theory

Yonsei University Seoul, Visiting Student Economics, DAAD scholarship, 1.1 **08/2016 - 12/2016**

Friedrich-Schiller Gymnasium, Abitur, Best in class, 1.0 **06/2013**

Work-in-Progress

Social Networks, Skill Acquisition, and Technology Adoption **since 04/2021**

- I am interested in how individuals update their skills upon the arrival of a new technology and whether the social network structure can predict (or causally impact) success rates
- As individuals tend to form networks with distorted information flow, this question has implications for the organizational structure of coworkers and teams within a firm
- To measure social networks among workers, I am exploring data sources from collaboration platforms

Firm-Specific Knowledge, Automation, and Worker Replacement **since 05/2021**

- Utilizing detailed task and process data at the firm level and recommendations for automation, we are interested in how firms improve their processes. Also, we measure workers' firm-specific knowledge and the frictions arising from worker turnover
- Joint project with Florian Englmaier, Thomas Fackler, and Nadzeya Laurentsyeva

Completed Projects

Gender Attitudes and Firm Performance (Master's Thesis) **07/2020 - 12/2020**

- I apply Natural Language models to business compliance reports on gender equality to measure firms' attitudes towards gender and analyze their impact on firm performance using data science tools

CEO Behavior and Firm Performance (Course Project) **05/2020 - 06/2020**

- Topic Modeling of CEO activity data to replicate and extend Bandiera et al. 2020

Peru's Mining Mita, Living Standards, and Voter Preferences (Course Project) **07/2019 - 09/2019**

- Spatial Regression Discontinuity Design to replicate and extend Dell 2010

CS50 Introduction to Artificial Intelligence in Python (MOOC) **02/2021 - 03/2021**

CS50 Introduction to Computer Science (MOOC) **06/2020 - 08/2020**

Employment History

Research Assistant, ifo Institute, Macroeconomics and Surveys, Munich **since December 2018**

- Conducting econometric and statistical analyses as well as microsimulation studies in Python and Stata on German tax and welfare reforms using large scale Panel datasets
- Collaborating in economic policy consulting for German federal ministries, European and International organizations by participating in and (co-)authoring research reports and presentations

Visiting Associate, **The Boston Consulting Group**, Banking, Berlin **January - March 2018**

- Collaborated in a consulting team on a challenging and fast-paced business project for an Austrian retail bank by analyzing client data using Excel to evaluate potential turnaround measures

Intern, **Deutsche Bundesbank**, Payment System Analysis, Frankfurt a.M. **September - December 2017**

- Conducted in-depth analysis of financial data on banks' payment behavior in the European Settlement System (TARGET2) using Stata, and communicated insights through reports and presentations

Research Assistant, ZEW, Environmental and Resource Economics, Mannheim **June - August 2017**

- Gathered and analyzed literature for a policy report on eco-innovation policies submitted to the European Commission

Software Skills

- Intermediate proficiency with Python (optimization, dynamic programming, data science), Stata, git, ArcGIS

Language Skills

- German (native), English (fluent), French (Basic)

May 31st, 2021

NBER 2021 Doctoral Workshop on the Economics of AI: Call for Applications

Dear Team at NBER,

During my graduate coursework in economics, I focussed on econometric methods and machine learning tools, which allow analyzing non-conventional data for answering economic questions. For example, in my graduate thesis, I used text data from firm compliance reports to measure firms' attitudes towards women in the workplace and how it affects workforce composition and performance.
For conducting my current research, I am interested in utilizing methods from machine learning in my empirical work and studying the impact of new (AI-based) technologies on individual and organizational choices. I am currently exploring two research ideas:
First, existing work has shown that social networks play a significant role in individual decision-making by regulating access to information. As new technologies arrive frequently and require workers to update their skills, such access to information becomes more crucial. I am interested in measuring whether the network structure of workers helps predict and explain how successful they are at such updating. As individuals tend to form networks with distorted information flow (such as the tendency towards homophily), this question also has implications for the organizational structure of coworkers and teams within a firm.
Secondly, utilizing detailed process and task data at the firm level and AI-based recommendations for automation, my coauthors (see CV) and I seek to understand how firms respond to these recommendations. Additionally, we study how automation affects workers and the value of workers' firm-specific knowledge.

Participating in the NBER doctoral workshop on the economics of AI would be of great value to me by helping me develop my research questions and providing insights into the empirical challenges present in this research area. I am also excited to network with and learn from more experienced and inspiring participants. Thank you for your consideration.

With best regards,
Helene