# **CHRISTIAN DECKER**

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### **EDUCATION**

Ph.D. Economics, University of Zurich (Switzerland), 2017 – 2023 (expected).

M.Sc. Economics and Social Science, Bocconi University (Milan, Italy), 2017.

B.Sc. Economics (with Minor Mathematics), University of Mannheim (Germany), 2014.

### RESEARCH INTERESTS

Empirical Industrial Organization, Structural Econometrics, Information Economics, Machine Learning & Causal Inference.

# JOB MARKET PAPER

#### What's in an Airbnb Five-Star Rating? An Empirical Model of Bayesian Persuasion

Abstract: I study the welfare effects of Airbnb's customer rating system using a structural empirical model of Bayesian persuasion with moral hazard. This framework reveals that by pooling many listings of relatively lower quality at the 'adequate' 5 stars, the current rating system design expands the set of listings customers may chose over alternative options and thereby increases Airbnb's market shares and profits. I set up a numerically solvable demand model of the short-term accommodation market around this Bayesian persuasion problem and its interplay with the platform's pricing decision and hosts' decision to join the platform and exert costly effort to improve their quality. I exploit variation in the rating distribution and market conditions across 56 major travel destinations in the United States over the years 2018 and 2019 to structurally estimate this model and back out the distribution of unobserved quality. Counterfactual exercises suggest that (i) the platform would break down without a rating system, and (ii) Airbnb's strategic rating system design led to a consumer welfare loss of US\$288M and a redistribution of profits from high to medium quality hosts of almost US\$750M compared to fully revealing ratings in the markets and period studied.

#### **PUBLICATION**

P-hacking in clinical trials and how incentives shape the distribution of results across phases

(with Jérôme Adda and Marco Ottaviani)

Proceedings of the National Academy of Sciences 117 (24) 13386-13392, June 2020.

Related Op-eds: VoxEU, ProMarket.

#### WORKING PAPERS

Pre-Registration and Credibility of Clinical Trials (with Marco Ottaviani)

The Order of Move in a Conversational War of Attrition

# HONORS, SCHOLARSHIPS, AND GRANTS

Zurich GSE PhD Dissertation Fellowship, 2022–2023.

Zurich GSE Director's Grant (US\$ 6,600, maximum amount), May 2021.

UBS Center Scholarship, 2017-2021.

UniCredit & Universities Masterscholarship, 2014–2016.

Bocconi Graduate Merit Award, 2014–2016.

# **CONFERENCE PRESENTATIONS**

CEPR IO Virtual Gathering (October 2022).

Fourth Annual Theory of the Firm Conference on Academic Lobbying at Columbia University, NYC (December 2019).

Workshop on the Economics of Research and Experimentation at Bocconi University, Milan (March 2017).

#### TEACHING EXPERIENCE

University of Zurich

Industrial Economics (undergraduate), TA for Armin Schmutzler, Spring 2019 & Spring 2020.

Supervision of 1 Bachelor and 3 Master Theses, 2020 – current.

University of Mannheim

Introduction to Statistics (undergraduate), TA for Toni Stocker, Spring 2013.

# **PROFESSIONAL ACTIVITIES**

Refereeing: Economic Journal.

Organization of the IO Reading Group and Team Meeting at the University of Zurich, 2020 – 2022.

Collaborator on ERC Advanced Grant 295835 EVALIDEA (PI Marco Ottaviani), 2015–2017.

IGIER Visiting Student Initiative, 2015–2016.

Internship at the Centre for European Economic Research (Mannheim, Germany) – Research Group "Competition and Regulation", 2014.

### **SKILLS**

### **Programming**

Julia, Mathematica, Matlab, Python, Stata.

# Languages

English (fluent), German (native), Italian (fluent), Latin.

# **REFERENCES**

**Gregory S. Crawford** (Main Advisor)

Professor of Economics University of Zurich gregory.crawford@econ.uzh.ch

**Holger Sieg** 

Professor of Economics University of Pennsylvania holgers@econ.upenn.edu

Placement Director: Joachim Voth, joachimvoth@gmail.com

Graduate Coordinator: Mirjam Britschgi, mirjam.britschgi@econ.uzh.ch

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## Marco Ottaviani

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