

# ECONOMICS OF DIGITIZATION MEETING — APPLICATION

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I am a third year economics PhD student at UC Berkeley. I have finished the core sequences in microeconomics, macroeconomics, econometrics and economic history. Also, I have completed the full year graduate sequence in Psychology and Economics (with Matthew Rabin and Stefano DellaVigna) as well as field courses in labor economics (with David Card and Jesse Rothstein) and a graduate level course on Machine Learning.

Digitization is the the Industrial Revolution of my generation. Let me give you two examples to illustrate the kind of questions that fascinate me about digitization.

## **Tracking of Labor Inputs**

Digitization made it possible for individuals to collaborate remotely. A nice feature of remote collaboration is that individual contributions are recorded. For instance, in software development version control systems track each programmer's code contribution to a project. This facilitates fine grained measurements of a worker's marginal product. In classical models we would believe that better monitoring leads to higher worker volatility, higher wage discrimination and new signalling incentives. High resolution data allows us to test these models on a precise scale.

## **Volunteering for Communities**

The internet has given rise to communities that harvest expert knowledge from a large group of people (Wikipedia, Stackexchange) or collaborate on product development (GitHub). Many participants invest multiple hours of unpaid work in these communities, sometimes despite having the possibility of being paid to do so. What drives individuals to donate their time and work? What are the effects of volunteering on a volunteer's labor market outcomes? We still lack good models to answer these questions, but digital communities now give us **the data**.

I am excited to learn more about this young research branch and would be excited to participate at the Economics of Digitization meeting in March.

# David J. Birke

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CONTACT INFORMATION	David Birke An den Röthen 23 61381 Friedrichsdorf Germany	phone: +1 321 806 7329 e-mail: djbirke@berkeley.edu
PERSONAL	Citizenship: German	Date of birth: January 30, 1991
EDUCATION	<b>University of California, Berkeley</b> Ph.D. Student in Economics	since Fall 2014
	<b>University of Mannheim</b> Master of Science Economics (with distinction)	August 2011 – July 2013
	<b>University of California, Berkeley</b> Exchange year, graduate coursework in Microeconomics, Macroeconomics and Psychology & Economics	August 2011 – May 2012
	<b>University of Mannheim</b> Bachelor of Science Economics	August 2008 – July 2011
	<b>University of Copenhagen</b> Exchange semester (Erasmus), graduate coursework	Fall 2010
	<b>Goethe University Frankfurt</b> <i>Schülerstudium</i> (pupil studies) Exams in economics and business informatics	2005 – 2006
PROFESSIONAL EXPERIENCE	<b>University of Chicago</b> <b>Becker Friedman Institute</b> Research Professional, Prof. Emily Oster	September 2013 – May 2014
	<b>University of Mannheim</b> Teaching assistant, Principles of Economics	Fall 2012
	<b>AXA Konzern AG</b> Internship, Value- and Risk Management <i>Analysis and consolidation of two data conversion systems.</i>	June – August 2010
	<b>University of Mannheim</b> Research assistant, Prof. Uta Pigorsch <i>Analysis of S&amp;P 500 data, generation of representative portfolios.</i>	February – June 2010
	<b>Deutsche Bank AG</b> Internship, Inhouse Consulting <i>Data analysis for growth initiative in corporate clients sector.</i>	July – August 2007
	<b>Interactive Data Managed Solutions AG</b> Internship, Product Management <i>Programming a PHP demo application for the bond search engine.</i>	June – August 2006
SOCIAL COMMITMENT	Member of the student council (2008–2013). Vice President of residence hall with 400 occupants (2008/09).	
LANGUAGES	German (native), English (fluent), Latin ( <i>Latinum</i> ).	
PROGRAMMING	Python, Prolog, Perl, R, Stata, Matlab.	
SCHOLARSHIPS	Doctoral scholarship, Graduate School of Economic and Social Sciences, Mannheim (2012/13). DAAD scholarship for one year exchange at University of California, Berkeley (2011/12). <i>Gebührenstipendium</i> (tuition scholarship), University of Mannheim (2009/10). Scholar of the German National Academic Foundation (2010–2013).	