Tilman Graff

Busara Center at Daykio Plaza, Ngong Ln, Nairobi, Kenya

tgraff@princeton.edu
@TilmanGraff

EDUCATION

University of Oxford — Oxford, UK
Master of Philosophy in Economics; with distinction — *October 2016 – June 2018*
- **Master's Thesis**: *"Spatial Inefficiencies in Africa's Trade Network"* – conducted a large-scale network optimisation exercise to construct a novel dataset on suboptimal trade routes for the entire African continent. Showed econometrically how infrastructure investments from colonial times lead to persistent spatial network inefficiencies. Supervised by Prof. Ferdinand Rauch. Awarded distinction.
- **Core Coursework**: Macroeconomics, Microeconomics, Econometrics, Mathematical Methods
- **Electives**: Machine Learning, Big Data Econometrics, Advanced Macroeconomics, Development Economics, Urban Spatial Economics, Micro-finance

Ludwig Maximilians University Munich — Munich, Germany
Bachelor of Science in Economics; final grade: very good (1.18) — *April 2014 – July 2016*

Toulouse School of Economics — Toulouse, France
Exchange semester — *August 2015 – December 2015*

Technical University Munich — Munich, Germany
Bachelor of Science in Management and Technology; with distinction (1.40) — *October 2012 – July 2015*

WORK EXPERIENCE

Busara Center for Behavioral Economics — Nairobi, Kenya
Research Specialist — *Since August 2018*
- **Research Management**: As research specialist to Professor Johannes Haushofer (Princeton), overseeing entire research process of multiple large-scale academic studies, including behavioral laboratory operations, field work logistics, and data collection.
- **Data Analysis**: Supporting the scientific process of rigorous analysis of large experimental and observational data sets. Employing various statistical methods and estimation techniques, data cleaning, visualization, and econometric theory.
- **Research Administration**: Managing all administrative parts of the research process, including grant proposal writing, budgeting, and ethics compliance.

Vivid Economics — London, UK
Intern — *Summer 2018 (2 months)*
- **Spatial Big Data Analysis**: Developed large-scale statistical tools to analyze spatial deforestation patterns in a West African country. Employed rich satellite data to build a machine learning tool predicting future dynamics of forest loss.
- **Development Policy Consulting**: For a government client, authored policy briefs on economic conditions in more than ten developing countries.
- **Data Visualization**: Created extensive graphs and maps visualizing aid flows from development agencies, access to public goods, and climate conditions.

ifo Institute for Economic Research — Munich, Germany
Research Intern — *Summer 2016 (2 months)*
- **Policy Evaluation**: Developed a research strategy to causally identify the welfare effects of two policy interventions on the German transport sector.
- **Data Collection**: As part of the research cluster on Industrial Organization, helped with constructing a dataset on structural breaks within 100+ European industries.
- **Research Seminars**: Attended and helped run various research colloquia, discussion groups, and brown-bag seminars.

German Bundestag — Berlin, Germany
Intern — *Spring 2016 (1 month)*
- **Policy Research**: Supported the parliamentary bureau of MP Christian Flisek with background research on policy proposals, opposition, and paths to political consensus.
- **Committee Meetings**: Supported MP in meetings of Parliamentary Committees on Legal Affairs and Digital Agenda, including writing policy memos and abstracts.
- **Public Appearances**: Developed communication strategies for MP at political events, panels, and talks and drafted outlines for speeches in Parliament.

IT Proficiency

- **R**: full research proficiency
  - **Econometric Analysis**: Experience from extensive research for two Bachelor's dissertations and a Master's thesis. Implemented all most-common econometric estimation methods. Also conducted Monte-Carlo simulations, constructed non-standard covariance-estimators, and wrote own function to examine confounding power of selection on observables.
  - **Big Data**: Implemented Machine Learning tasks recognizing linguistic patterns in central bank reports and political speeches. Built large-scale dataset by extracting travel information from online routing service.
  - **Various**: Conducted spatial analysis (shortest-path routing, polygon matching). Simulated off-equilibrium dynamics in game-theoretical setting. Summarised findings in concise scientific graphs and maps.
- **STATA**: advanced proficiency
  - **Household Surveys**: Worked with both the German *G-SOEP* and the American *Survey of Consumer Finances* datasets to investigate consumption patterns among mortgage borrowers.
  - **Laboratory Research**: Analyzed labor market interaction from own experimental research project.
- **Matlab**: advanced proficiency
  - **Large-scale Optimization**: Conducted research on optimal flows through calibrated trade-networks and implemented a computationally-friendly strategy to optimise over the space of possible networks in order to detect inefficiencies. Produced multidimensional network graphs to visualise findings.
  - **Simulation**: Solved and simulated macroeconomic DSGE environments as well as structural models in a development economics context.
- **Other**: GIS (basic), Python (basic), Git (basic), zTree, Latex, Office

Stipends and Awards

- **German National Academic Foundation**: Fellow — *since 2012*
- **German Academic Exchange Service**: Scholarship for Graduate Studies — *2017 – 2018*
- **Europaeum**: Jenkins Memorial Scholar 2017 at the University of Oxford — *2016 – 2017*
- **LMU Munich**: Research Prize for student project on reciprocity in the laboratory — *2016*
- **TU Munich Economics Department**: Prize for one of the best undergraduate theses — *2015*
- **TU Munich Economics Department**: Acceptance to the Dean's List — *2015*

Other Relevant Experience

- **Oxford University Strategic Studies Group**: *Student Society focusing on International Affairs* — *2017 – 2018*
  - **Committee Member**: Helped organizing weekly events on current issues in national security and international relations. Recent speakers include Hala Gorani (CNN), Sir Richard Dearlove (MI6), and Lynne Owens (NCA).
  - **Treasurer**: Responsible for overseeing the society's finances and implementing an online tool to more efficiently administer membership data. Also wrote multiple successful applications for external funding.
- **St. Antony's College Boat Club, Oxford**: *Collegiate Rowing Club* — *2017 – 2018*
  - **Men's Captain**: Responsible for administering day to day operations, including scheduling training plans, recruiting rowers, and hiring professional coaches. Oversaw the introduction of an optional gender neutral rowing track into the organisation.
  - **Social Media Officer**: Streamlined the club's online profiles on various social media platforms.
- **Oxford University**: Research Assistant to Oxford academics Agnes Kovacs and Patrick Moran — *Summer 2017*
- **Munich Kammerspiele Theatre**: Moderator of 7 month interdisciplinary seminar "Reading Piketty" — *2016*
- **German National Academic Foundation**: Organiser of 10 day study trip to Moscow, Russia. — *2016*
- **TSEconomist Student Newspaper**: Assistant Editor — *2015*

Skills

- **Languages**: German (native), English (fluent), French (advanced, B1), Russian (basic, A1)
- **GRE**: Quant: 168, Verbal: 163, Writing: 5.5

References

Prof. Ferdinand Rauch
Dep. of Economics, University of Oxford
+44(0)1865 281165
ferdinand.rauch@economics.ox.ac.uk

Prof. Klaus Schmidt
Dep. of Economics, LMU Munich
+49(0)89 2180 2250
klaus.schmidt@lmu.de

October 14, 2018