

KARSTEN SCHROER

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EDUCATION

- University of California at Berkeley, US** 2022 (*exp Q2*)
Visiting Ph.D. Scholar in Operations & Information Management
Advisor: Prof. Thomas Y. Lee
- University of Cologne, DE** 2022 (*exp Q2*)
Ph.D. in Operations & Information Management
Advisor: Prof. Wolfgang Ketter
Awards: AIS Doctoral Consortium Fellow (2021), DAAD PhD Research Scholarship (tuition and maintenance) for research visit to UC Berkeley
- University of Cambridge, UK** 2015
M.Phil in Industrial Systems, Manufacture & Management
Grade: Distinction (top 5% of cohort)
Awards: The Frederick Alfred Warren Prize (highest mark overall in research dissertation), DAAD Full Graduate Scholarship (tuition and maintenance)
- University of Birmingham, UK** 2013
B.Eng in Mechanical Engineering with Business Management
Grade: First Class (top 5% of cohort)
Awards: three consecutive First Class Scholarships; Gilbert Walker Prize (most outstanding student in Mechanical Engineering & Commerce); Ellis, Linning and Sandifer Prize (most outstanding student in Mechanical Engineering program)
- International German School Brussels, BE** 2010
High School Diploma (Abitur)
Grade: 1.4

EXPERIENCE

- University of Cologne & UC Berkeley** Apr '18 - present
(*Visiting*) PhD Researcher & Academic Faculty Cologne, DE; Berkeley, US
- Researched data-driven decision making (econometrics/statistics, machine learning, optimization, simulation, reinforcement learning) with focus on future energy and mobility systems (EV charging, fleet management); 6-months research visit at UC Berkeley
 - Published first-authored papers at leading international operations management and information systems conferences and high-impact journals
 - Taught "Data Science and Machine Learning" (Bachelor), "Analytics for Sustainable Society" (Master), "Advanced Seminar on Information Systems" (Master/Ph.D.) and gave annual guest lecture on "Smart Sustainable Mobility" (MBA/EMBA); Supervised theses in data science and operations management at Bachelor's, Master's and MBA level
 - Co-led DE- and EU-level grant proposals (total funds acquired: EUR 228k) and acquired two active company research collaborations
- Institute of Energy Economics at the University of Cologne (EWI)** Oct '19 - Oct '21
Affiliated Researcher/Data Scientist Cologne, DE
- Co-led data-driven applied research projects in the area of smart electric vehicle charging and charging infrastructure planning; managed teams of up to three researchers
 - Developed proposal materials for project acquisitions and delivered senior management and investor presentations (e.g., results presentations, workshop series on AI and the Smart Grid)

- Contributed to EWI's thought-leadership in the area of electric mobility by co-authoring technical reports

Roland Berger

Management Consultant, Energy & Utilities Practice

Feb '16 - Apr '18

Duesseldorf, DE

- Led own work streams in large international strategy development and restructuring assignments in Europe and the Middle East for clients in the utilities, oil&gas, chemicals and healthcare industries; extensive senior management exposure
- Managed teams of up to three interns and junior consultants; acted as mentor for summer interns and new hires
- Contributed to project acquisitions by crafting proposal documents and participating in pitch presentations with senior management attendance; co-developed new RB offering in the area of AI-powered maintenance and prognostics

McKinsey & Company

Visiting Associate (Intern)

Mar '14 - May '14

Berlin, DE

- Supported an operational excellence and store concept re-launch project for a global fashion retailer

Innogy Consulting (formerly RWE Consulting)

Junior Consultant (Intern)

Dec '13 - Feb '14

Essen, DE

- Supported the development of a scenario-based outlook on the future of the Polish energy ecosystem and identified strategic implications for RWE (now Innogy)

Simon-Kucher & Partners

Associate Consultant (Intern)

Aug '13 - Nov '13

Bonn, DE

- Supported the conceptualization and implementation of a web-based decision support tool for price promotions at a major German supermarket chain

SKILLS

Programming APIs & Technologies

Python, R, Julia, SQL, LaTeX, Git
machine learning (scikit-learn, TensorFlow, Keras), optimization (commercial (CPLEX, Gurobi) and non-commercial (GLPK, Ipopt) solvers, higher-level frameworks (JuMP, Pyomo)), large-scale simulation (SimPy), causal inference/econometrics (R and Python statistics packages), GIS (geopandas, h3, kepler.gl), big data (Google Cloud)

Languages

English, German (native), French, Dutch

SOCIETAL SERVICE & PERSONAL INTERESTS

Academic Service

Regular ad hoc reviewing activities for leading Information Systems conferences (ICIS, ECIS, WI) and journals (Journal of Information Technology)

Sports

Rowing at competitive level: currently at RG Benrath Rowing Club; previously at University of Cologne Rowing Club (2018-2020), Wolfson College Cambridge Boat Club (Boat Captain, 2014-15), Cercles des Régates de Bruxelles Rowing Club (2007-10), Siegburger RV Rowing Club (2004-07)

Societies

Berkeley Energy and Resource Collective (BERC), Haas Technology Club, Wolfson College Cambridge Mayball Organizing Committee (2015); James Watt Undergraduate Society Birmingham (2010-13)