

# Jakob J. Schoeffer

☎ +49 175 4460541 ✉ jakob.schoeffer@gmail.com 🔗 linkedin.com/in/jakobschoeffer 📁 github.com/jakobschoeffer

## EDUCATION

---

### Karlsruhe Institute of Technology (KIT)

*PhD in Information Science*

Karlsruhe, Germany

*Oct. 2019 – present*

### Georgia Institute of Technology

*MS in Operations Research*

Atlanta, GA, USA

*May 2017*

### Karlsruhe Institute of Technology (KIT)

*BS in Industrial Engineering and Management*

Karlsruhe, Germany

*Feb. 2015*

## PEER-REVIEWED PUBLICATIONS

---

- [1] **Schoeffer, J.**, Machowski, Y., Kuehl, N. (2022). *“There is not enough information”: On the effects of transparency on perceptions of informational fairness and trustworthiness in automated decision making.* ACM Conference on Fairness, Accountability, and Transparency (FAccT '22)
- [2] **Schoeffer, J.** (2022). *A human-centric perspective on fairness and transparency in algorithmic decision-making.* Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22)
- [3] **Schoeffer, J.**, Machowski, Y., Kuehl, N. (2022). *Perceptions of fairness and trustworthiness based on explanations in human vs. automated decision-making.* 55<sup>th</sup> Hawaii International Conference on System Sciences 2022 (HICSS-55)
- [4] **Schoeffer, J.**,\* Ritchie, A.,\* Naggita, K.,\* Monachou, F.,\* Finocchiario, J.,\* Juarez, M. (2021). *Online platforms and the fair exposure problem under homophily.* ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO '21)  
(\* denotes equal contribution)
- [5] **Schoeffer, J.**, Kuehl, N. (2021). *Appropriate fairness perceptions? On the effectiveness of explanations in enabling people to assess the fairness of automated decision systems.* Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing (CSCW '21)
- [6] **Schoeffer, J.**, Kuehl, N., Valera, I. (2021). *A ranking approach to fair classification.* ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS '21)
- [7] **Schoeffer, J.**, Machowski, Y., Kuehl, N. (2021). *A study on fairness and trust perceptions in automated decision making.* Transparency and Explanations in Smart Systems (TESS) Workshop at the 26<sup>th</sup> Annual Conference on Intelligent User Interfaces (ACM IUI 2021)
- [8] Hemmer, P., Kuehl, N., **Schoeffer, J.** (2020). *DEAL: Deep evidential active learning for image classification.* 19<sup>th</sup> IEEE International Conference on Machine Learning and Applications (ICMLA)

## WORK IN PROGRESS OR UNDER REVIEW

---

- [1] **Schoeffer, J.**, De-Arteaga M., Kuehl, N. (2022). *On the relationship between explanations, fairness perceptions, and decision quality.* Work in progress
- [2] Baier, L., Schloer, T., **Schoeffer, J.**, Kuehl, N. (2021). *Detecting concept drift with neural network model uncertainty.* Under review

## RELEVANT EXPERIENCE

---

### Visiting Researcher

*The University of Texas at Austin*

Jan. 2022 – present

*Austin, TX, USA*

- Research project at the intersection of explainability and fairness in AI-based decision making
- Collaboration with Prof. Maria De-Arteaga

### Research Associate

*Karlsruhe Institute of Technology (KIT)*

Oct. 2019 – present

*Karlsruhe, Germany*

- Research on fairness, accountability and transparency in AI-based decision making
- Project lead on AI-based service ecosystems, funded by the Federal Government
- Teaching of *Digital Services* and *AI in Service Systems*

### (Senior) Data Scientist

*International Business Machines Corp. (IBM)*

July 2017 – Aug. 2019

*Armonk, NY, USA*

- Worked at the Chief Analytics Office, supporting IBM's C-suite
- Developed and implemented statistical and machine learning models for decision support
- Managed team of 5 data scientists and consultants
- Co-led team's recruiting efforts, both strategy and execution

### Research and Teaching Assistant

*Karlsruhe Institute of Technology (KIT)*

Sept. 2013 – Aug. 2016

*Karlsruhe, Germany*

- Worked as a RA and TA in the field of mathematical optimization
- Offered tutorials to >100 undergraduate and graduate students
- Graded assignments and exams in mathematical optimization and stochastic modeling

### OTHER

---

#### Current Extracurricular Work:

- MD4SG (Bias, Discrimination, and Fairness working group) project lead since Mar. 2020
- Data Science for Social Good (DSSG) Solve volunteer since July 2020

#### Academic Service:

- Program committee (PC) member at ACM EAAMO '21, '22; TExSS Workshop @ ACM IUI '22 ; TRAIT Workshop @ ACM CHI '22
- Reviewing at various conferences (e.g., ACM CSCW, ICIS, HICSS)

**Programming:** Python, Java, SQL, R, MATLAB

**Honors & Awards:** Full-ride graduate scholarship (USA) by the German Academic Exchange Service (DAAD); Manager's Choice Award (IBM); IBM Chief Analytics Office Eminence & Excellence Award; Research travel grant (USA) by the Karlsruhe House of Young Scientists (KHYS)

**Hobbies (sample):** Outdoor sports, climbing, biking, squash, cooking, photography, design, modern art, music

As of April 15, 2022