# Jakob J. Schoeffer

#### **EDUCATION**

Karlsruhe Institute of Technology (KIT)

PhD in Information Systems

Georgia Institute of Technology

MS in Operations Research

Karlsruhe Institute of Technology (KIT)

BS in Industrial Engineering and Management

Karlsruhe, Germany

Oct. 2019 – present

Atlanta, GA, USA

May 2017

Karlsruhe, Germany

Feb. 2015

## PEER-REVIEWED PUBLICATIONS

- [1] Schoeffer, J., Kuehl, N., Valera, I. (2021). A ranking approach to fair classification. ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS '21)
- [2] Schoeffer, J., Machowski, Y., Kuehl, N. (2021). A study on fairness and trust perceptions in automated decision making. Transparency and Explanations in Smart Systems (TExSS) Workshop at the 26<sup>th</sup> Annual Conference on Intelligent User Interfaces (ACM IUI 2021)
- [3] 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 under Review or in Press

- [1] Schoeffer, J., Machowski, Y., Kuehl, N. (2021). "There is not enough information": On the effects of transparency on perceptions of informational fairness and trustworthiness in automated decision making. Under review
- [2] Schoeffer, J., Machowski, Y., Kuehl, N. (2021). Perceptions of fairness and trustworthiness based on explanations in human vs. automated decision-making. Finally accepted at 55<sup>th</sup> Hawaii International Conference on System Sciences 2022 (HICSS-55)
- [3] Schoeffer, J., Kuehl, N. (2021). Appropriate fairness perceptions? On the effectiveness of explanations in enabling people to assess the fairness of automated decision systems. Poster Publication at 24<sup>th</sup> ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '21)
- [4] Schoeffer, J.,\* Ritchie, A.,\* Naggita, K.,\* Monachou, F.,\* Finocchiaro, J.,\* Juarez, M. (2021). Online platforms and the fair exposure problem under homophily. Poster at ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO '21) (\* denotes equal contribution)
- [5] Baier, L., Schloer, T., **Schoeffer, J.**, Kuehl, N. (2021). Detecting concept drift with neural network model uncertainty. Under review

# RELEVANT EXPERIENCE

# Research Associate

Oct. 2019 – present

Karlsruhe, Germany

Karlsruhe Institute of Technology (KIT)

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

#### (Senior) Data Scientist

July 2017 – Aug. 2019

Armonk, NY, USA

International Business Machines Corp. (IBM)

- 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

Sept. 2013 – Aug. 2016

Karlsruhe, Germany

Karlsruhe Institute of Technology (KIT)

- 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

#### 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, reviewing at various conferences

**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 October 14, 2021