Conrad Borchers

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Education

Carnegie Mellon University   *Pittsburgh, PA*
HUMAN-COMPUTER INTERACTION, PHD   *08/2022 - present*
University of Oxford   *Oxford, United Kingdom*
SOCIAL DATA SCIENCE, MSc   *10/2021 - 08/2022*
University of Tübingen   *Tübingen, Germany*
PSYCHOLOGY, BSc   *10/2018 - 07/2021*

Professional Experience

08/2022 -	**Graduate Research Assistant**, Human-Computer Interaction Institute, Carnegie Mellon University
02/2020 -	**Research Affiliate**, Lab of Christian Fischer, University of Tübingen
11/2021 - 07/2022	**Student Researcher and Team Lead**, Oxford Artificial Intelligence Society
11/2021 - 07/2022	**Graduate Research Assistant**, Saïd Business School, University of Oxford
05/2021 - 09/2021	**Research Intern**, CAHL Lab (Zach Pardos), University of California, Berkeley
03/2021 - 06/2021	**Teaching Assistant (Cognitive Modeling)**, Department of Computer Science, University of Tübingen
08/2020 - 01/2021	**Undergraduate Research Assistant**, Tübingen School of Education
02/2019 - 07/2020	**Undergraduate Research Assistant**, Leibniz Knowledge Media Research Center (IWM)

Publications

JOURNAL ARTICLES

J5 – Pardos, Z. A., **Borchers, C.**, & Yu, R. (2023). Credit hours is not enough: Explaining undergraduate perceptions of course workload using LMS records. The Internet and Higher Education, 56, 100882. `https://doi.org/10.1016/j.iheduc.2022.100882`

J4 – Rosenberg, J., **Borchers, C.**, Burchfield, M., Anderson, D., Stegenga, S., & Fischer, C. (2022). How educational institutions reveal students' personally identifiable information on Facebook. Learning, Media and Technology. Advanced Online Publication. `https://doi.org/10.1080/17439884.2022.2140672`

J3 – Rosenberg, J., **Borchers, C.**, Burchfield, M., Anderson, D., Stegenga, S., & Fischer, C. (2022). Posts About Students on Facebook: A Data Ethics Perspective. Educational Researcher. Advanced Online Publication. `https://doi.org/10.3102/0013189X221120538`

J2 – Rosenberg, J., Burchfield, M., **Borchers, C.**, Gibbons, B., Anderson, D., & Fischer, C. (2021). Social media and students' privacy: What schools and districts should know. Phi Delta Kappan, 103(2), 49-53. `https://doi.org/10.1177/00317217211051145`

J1 – Rosenberg, J., **Borchers, C.**, Dyer, E., Anderson, D. & Fischer, C. (2021). Understanding Public Sentiment About Educational Reforms: The Next Generation Science Standards on Twitter. AERA Open, 7(1), 1-17. `https://doi.org/10.1177/23328584211024261`

CONFERENCE PROCEEDINGS [PEER-REVIEWED]

C3 – **Borchers, C.** & Pardos, Z. A. (In-press). Insights into undergraduate pathways using course load analytics. In Proceedings of the 14th International Learning Analytics and Knowledge Conference (LAK). Arlington, TX. ACM. `https://doi.org/10.1145/3576050.3576081`

C2 – **Borchers, C.**, Rosenberg, J., Gibbons, B., Burchfield, M., & Fischer, C. (2021). To Scale or Not to Scale: Comparing Popular Sentiment Analysis Dictionaries on Educational Twitter Data. Proceedings of the 14th International Conference on Educational Data Mining (EDM). Paris, France.

C1 – Burchfield, M., Rosenberg, J., **Borchers, C.**, Thomas, T., Gibbons, B., & Fischer, C. (2021). Are Violations of Student Privacy "Quick and Easy"? Investigating the Privacy of Students' Images and Names in the Context of K-12 Educational Institution's Posts on Facebook. Proceedings of the 14th International Conference on Educational Data Mining (EDM). Paris, France.

Workshop Publications [Peer-Reviewed]

W1 – **Borchers, C.**, Gala, D. S., Gilburt, B., Oravkin, E., Bounsi, W., Asano, Y. M., & Kirk, H. R. (2022). Looking for a Handsome Carpenter! Debiasing GPT-3 Job Advertisements. Proceedings of the 4th Workshop on Gender Bias in Natural Language Processing (NAACL).

Student-led Conferences, White Papers, and Blog Posts

M3 – **Borchers, C.** (2020). Die Replikationskrise in der Psychologie - Reflexionen und Implikationen für die Erziehungswissenschaft. [The Replication Crisis in Psychology - Reflections and Implications for Pedagogy]. Dynamiken des Pädagogischen Perspektiven auf Studium, Theorie und Praxis. Budrich.

M2 – **Borchers, C.**, Rosenberg, J., & Fischer, C. (2020). An Examination of the #NGSSchat Storify Database. `https://doi.org/10.31219/osf.io/4tafx`

M1 – **Borchers, C.**, Ferdinand, J., & Fischer, C. (2020). Inquiry-based Learning: Forschendes Lernen im Unterricht. [Inquiry-based learning in classroom instruction]. `https://lead.schule/blog/forschendes-lernen-im-unterricht/`

Presentations & Invited Talks

Conference Presentations

P4 – Fischer, C., Morina, F., **Borchers, C.**, Klein, L., & Eich, M. (2022, April). Informal Professional Development in Online Communities of Practice at Scale: Mapping Nationwide Educational Twitterspheres. Paper to be presented at the 2022 Annual Meeting of the American Educational Research Association, San Diego, CA.

P3 – **Borchers, C.**, Eder, T., & Scheiter, K. (2021, September). How Effective is Reflective search? A Time Slice Analysis of Dentistry Students' Visual Search Strategies and Pupil Dilation during Diagnosing Radiographs. 2nd Workshop on Mental Effort, Virtual Conference.

P2 – Rosenberg, J., **Borchers, C.**, Gibbons, B., Dyer, E., Anderson, D., & Fischer, C. (2021, April). Don't worry, be happy? A sentiment analysis of the #NGSSchat Twitter community. Paper at the 2021 annual meeting of the American Educational Research Association, Virtual Conference.

P1 – Fischer, C., Morina, F., **Borchers, C.**, & Klein, L. (2021, March). Using Big Data to Support Educational Change: Twitter as a Platform for Informal Professional Development. Paper presented at the 2021 annual meeting of the Leibniz Education Research Network, Hannover, Germany.

Invited Talks

T2 – **Borchers, C.** (2022, October). Debiasing GPT-3 Job Ads. The Data Skeptic Podcast hosted by Kyle Polich.

T1 – **Borchers, C.** (2022, September). Leveraging data science to improve educational processes: From K-12 student privacy on social media to higher education student workload. Invited talk at the Department of Theory & Practice in Teacher Education, University of Tennessee, Knoxville.

Awards, Fellowships, & Grants

2022	**LearnLab Summer School Participant (ITS Track)**, Carnegie Mellon University
2022	**Merck Innovation Cup '22 Participant**, Merck KGaA (Merck Group)
2021	**Best Poster Award**, 14th International Conference on Educational Data Mining
2021	**Learning Engineering Fellow**, EPIC@Berkeley - UC Berkeley GSE & Schmidt Futures
2019-2020	**Research Fellow**, European Federation of Psychology Students Associations (EFPSA)
2018	**BSc and MSc Scholarship**, German Academic Scholarship Foundation (Studienstiftung)

Teaching Experience

Teaching Assistant

Spring 2021   **Cognitive Modeling**, Department of Computer Science, University of Tübingen, Germany

Workshops

Fall 2022   **Sentence Embeddings for Twitter Research**, Introduction to Data Science Methods in Education, University of Tennessee, Knoxville; GitHub: https://tinyurl.com/sembutk

Service to the Academic Community

Peer Review

2023   **ISLS**, Conference Proceedings
2021-2022   **AERA**, Annual Meeting Proceedings