

Michael Oppermann

michael@oppermann.at | michaeloppermann.com | Vienna, Austria

Expertise I'm a **data visualization specialist** and **data scientist** interested in human-data interaction. I combine techniques and methods from visualization, machine learning, and human-centered design to make sense of data and derive value.

Visualization

Data science

User experience

Research

Coding

Teaching

Education

- 2017 - 2021 **PhD, Computer Science**
University of British Columbia, Canada
Thesis topic: *Data-Driven Prototyping in Information Visualization* (advised by Tamara Munzner)
- 2011 - 2017 **BSc and Dipl-Ing (Master), Business Informatics**
University of Vienna, Austria

Professional Experience

- Sep 2021 - Aug 2023 **Senior Consultant, Analytics & Data Science**
Virtual Identity, Vienna
Lead data scientist, responsible for implementing and maintaining scalable data pipelines, developing long-term data strategies, and setting up data measurements for global brands (banking, FMCG, mobility, etc). Spearheaded a company-internal program to build up data competencies across teams.
- Aug 2017 - Aug 2021 **Research Assistant (Information Visualization Group)**
University of British Columbia, Dept. of Computer Science, Vancouver (Canada)
Worked on a series of research projects with high industry relevance and published in top data visualization and human-computer interaction venues (VIS/TVCG, CHI, EuroVis/CGF). Applied mixed-methods research, supervised students, and worked in interdisciplinary teams.
- Jun 2019 - Apr 2020 **Research Intern**
Tableau Software, Palo Alto (USA)
Conceived, developed and evaluated VizCommender, a content-based recommendation system for visualization workbooks (published in *IEEE Trans. on Visualization and Computer Graphics*).
- May 2017 - Dec 2020 **Co-Founder and Web Developer**
Albedo OG, Austria
Implemented websites, e-commerce and customer relationship management applications. Provided hosting services and consulted clients.
- Nov 2014 - Jun 2017 **Student Assistant (Visualization & Data Analysis Group)**
University of Vienna, Faculty of Computer Science
Created the BikeSharingAtlas for visually analyzing bike sharing networks to inform urban planning (published in the *Int. Journal of Transportation*). I was also responsible for the maintenance and extension of websites and the departmental publications platform.
- Jul 2016 - Aug 2016 **Research Fellow (Visual Computing Group)**
Jul 2015 - Feb 2016 Harvard University, School of Engineering and Applied Sciences, Cambridge (USA)
Implemented a web-based version of NeuroLines to support the visual analysis of neuronal connectivity.
- Oct 2010 - Jun 2011 **Community Service**
Arbeiter Samariter Bund, Austria (*alternative to mandatory armed forces*)
- Summer 2009 **Web Development Intern**
absolventen.at (online job portal)
- Summer 2008 **Software Engineering Intern**
A1 Telekom Austria (telecommunications provider)

Teaching & Training Held guest lectures and coding tutorials, developed the curriculum, and tutored students.

- 2020 - 2021 University of British Columbia, Department of Computer Science
 CPSC 436V **Information Visualization** (undergraduate, *curriculum development*)
 2017, 2020 CPSC 547 **Information Visualization** (graduate)
- 2016 Harvard University, School of Engineering and Applied Sciences
 CS 171 **Visualization** (undergraduate, *curriculum development*)
- 2014 - 2016 University of Vienna, Faculty of Computer Science
 Human-Computer-Interaction & Psychology (undergraduate)

Service Reviewer (CHI, TVCG, EuroVis, MobileHCI since 2018)
 VP Social, UBC Computer Science Graduate Student Association (2019-2020)
 Workshop organization, Haptipedia at AsiaHaptics, South Korea (2018)

Languages I am fluent in German and English.

Publications

- 2022 Oppermann, M. and Munzner, T.: "VizSnippets: Compressing Visualization Bundles Into Representative Previews for Browsing Visualization Collections", *IEEE Trans. on Visualization and Computer Graphics (Proc. VIS)*, 28(1): 747-757.
- 2021 Oppermann, M., Liu, L., and Munzner, T.: "TimeElide: Visual Analysis of Non-Contiguous Time Series Slices", *Proc. IEEE Visualization Conference (VIS): Short Papers*.
- 2021 Oppermann, M., Kincaid, R., and Munzner, T.: "VizCommender: Computing Text-Based Similarity in Visualization Repositories for Content-Based Recommendations", *IEEE Trans. on Visualization and Computer Graphics (Proc. VIS)*, 27(2): 495-505.
- 2020 Oppermann, M., and Munzner, T.: "Ocupado: Visualizing Location-Based Counts Over Time Across Buildings", *Computer Graphics Forum (Proc. EuroVis)*, 39(3): 127-138.
- 2020 Oppermann, M. and Munzner, T.: "Data-First Visualization Design Studies", *Proc. of the IEEE VIS Workshop Evaluation and Beyond - Methodological Approaches for Visualization (BELIV)*, pp. 74-80.
- 2020 Ausserhofer, J., Gutounig, R., Oppermann, M., Matiasek, S., and Goldgruber, E.: "The Datafication of Data Journalism Scholarship: Focal Points, Methods and Research Propositions for the Investigation of Data-intensive Newswork", *Journalism*, 21(7):950-973.
- 2020 Seifi, H., Oppermann, M., Bullard, J., MacLean, K.E., and Kuchenbecker, K.J.: "Capturing Experts' Mental Models to Organize a Collection of Haptic Devices: Affordances Outweigh Attributes", *Proc. ACM Conf. Human Factors in Computing Systems (CHI)*.
- 2019 Seifi, H., Fazlollahi, F., Oppermann, M., Sastrillo, J.A., Ip, J., Agrawal, A., Park, G., Kuchenbecker, K.J., and MacLean, K.E.: "Haptipedia: Accelerating Haptic Device Discovery to Support Interaction & Engineering Design", *Proc. ACM Conf. Human Factors in Computing Systems (CHI)*.
- 2018 Oppermann, M., Sedlmair, M., and Möller, T.: "Bike Sharing Atlas: Visual Analysis of Bike-Sharing Networks", *Int. Journal of Transportation*, 6(1):1-14.
- 2018 Oppermann, M. and Munzner, T.: "Uncovering Spatiotemporal Dynamics from Non-Trajectory Data", *Proc. CityVis Workshop at IEEE VIS*, pp. 4-6.
- 2016 Beyer, J., Strobel, H., Oppermann, M., Deslauriers, L., Pfister, H.: "Teaching Visualization for Large and Diverse Classes on Campus and Online", *Proc. IEEE VIS Workshop on Pedagogy of Data Visualization*.