Oen McKinley

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Research Objectives

PhD candidate in Computer Science specializing in data visualization and graphics with interest in AI/ML and LLMs, seeking internship opportunities for Summer 2026.

Education

PhD, Computer Science   Washington University in St. Louis
Aug 2022 – May 2027 (Expected)

- Computer Science research with the VIBE Lab, working with Professor Alvitta Ottley.
- Coursework: Research Design, User Studies, AI/ML, Statistical Analyses, UI/UX, LLMs, Prototype Development, Algorithms.

MS, Computer Science   Washington University in St. Louis
Aug 2022 – May 2025

- GPA: 3.91/4.0
- Coursework: Research Design, User Studies, AI/ML, Statistical Analyses, UI/UX, LLMs, Prototype Development, Algorithms.

BA, Computer Science & Political Science   Grinnell College
Aug 2015 – May 2019

- GPA: 3.71/4.0
- Coursework: AI, Algorithms, Software Development, Chinese, Statistics.

Publications

Taking Truncation to Task: A Task-Based Exploration of Axis Truncation in Bar Charts
Oen McKinley, Alvitta Ottley. *ACM CHI*, Apr 2026.
Performed user studies to demonstrate the nuanced effects of truncating the y-axis of bar charts.
DOI: 10.1145/3772318.3790617

Trustworthy by Design: The Viewer's Perspective on Trust in Data Visualization
Oen McKinley, Saugat Pandey, Alvitta Ottley. *ACM CHI*, Apr 2025.
Generated key insights for visualization designers to better make trustworthy and effective data visualizations.
DOI: 10.1145/3706598.3713824

Exogenous and Endogenous Factors that Influence Subjective Trust in Visualization
R. Jordan Crouser, Syrine Matoussi, Lan Kung, Saugat Pandey, **Oen McKinley**, Alvitta Ottley. *IEEE VIS*, Oct 2024.
Further investigated the role of personal differences in individual trust for data visualization.
DOI: 10.1109/VIS55277.2024.00069

Do You Trust What You See? Toward A Multidimensional Measure of Trust in Visualization
Saugat Pandey, **Oen McKinley**, Alvitta Ottley. *IEEE VIS*, Oct 2023.
Presented a novel framework for understanding user trust in the context of data visualizations.
DOI: 10.1109/VIS54172.2023.00014

Experience

PhD Candidate - VIBE Lab   Washington University in St. Louis
Aug 2022 – Present, St. Louis, MO

- Author research related to Data Visualization for publication in global conferences such as ACM CHI and IEEE VIS, primarily focused on effective communication and user trust.

Assistant in Instruction - Introduction to Data Visualization   Washington University in St. Louis
Aug 2025 – Dec 2025, St. Louis, MO

- Hold lectures, studios, office hours, and meetings with students in the Introduction to Visualization course.
- Assist in lesson planning, grading, and material preparation for the course.

Manager - Forms (prev. Software Engineer)   Ease, Inc.
Jul 2019 – Dec 2022, Omaha, NE

- Managed Forms Engineering team, automating benefits enrollment.
- Improved UI/backend integration for client-specific needs.

Skills

Programming:	Python, R, Java, C++, C#, JavaScript, HTML/CSS, PHP, Ruby
General Tools:	Git, VisualStudio, SQL, .NET, Anaconda, JIRA, Qualtrics, LaTeX, React, Node.js
Research Tools:	reVISit, Vega, Hugging Face Spaces, Pytorch, RStudio, pandas, matplotlib, ggplot
Languages:	English (Native), Mandarin Chinese (Working Proficiency), Vietnamese (Intermediate)