

Education

- 2021 - 2026 **PhD, Computer Science & Engineering**, *Washington University in St. Louis*, Missouri, USA.
Advisor: Dr. Alvitta Ottley
- 2017 - 2021 **Bachelor of Science, Computer Science & Mathematics**, *Beloit College*, Wisconsin, USA.
Advisor: Dr. Eyad Haj Said

Awards & Honors

- 2025 **First Prize**, COVID Information Commons Student Paper Challenge organized by Columbia University.
- 2023, 2025 Earned **top 15-20% Departmental Honors** in the Department of Computer Science and Engineering through annual review consensus at Washington University in St. Louis.
- 2023 **Best Paper Award** for “Mini-VLAT: A Short and Effective Measure of Visualization Literacy” at *The Eurographics Conference on Visualization (EuroVIS) 2023* (Germany).
- 2021 **Conwell-Huffer Endowed Prize in Mathematics** for outstanding senior mathematics or computer science student at Beloit College.
- 2020 **Walter S. Haven Physics/Astronomy Prize** for outstanding summer research project at Beloit College.

Work Experience

Furman University

- August 2026 — **Assistant Professor in Computer Science.**
Present

Visual Interface and Behavior Exploration Lab (VIBE) @ Washington University

- August 2021 — **Graduate Research Assistant.**
May 2026 Conducted research on visualizations and human perception, design user studies, and apply AI/ML (e.g., MLLMs and Computer Vision) to improve visualization literacy and communication.
Skills: Data Visualization, Statistical Analysis, Psychometrics, Crowdsourcing, AI/ML, Computer Vision, MLLMs, Fine tuning, Prompt engineering, UX Design

Adobe Research

- May 2025 — **Research Scientist/Engineer Intern.**
August 2025 Developed an intelligent multi-agent LLM framework to assist users in creating aesthetic and visually appealing images. Designed and implemented interactive interfaces, integrated multi-modal reasoning, and conducted user studies to evaluate system effectiveness.
Skills: React.js, Flask, Figma, Adobe Creative Suite, AI/ML, MLLMs, Prompt Engineering, UI/UX, User Studies

American Institutes for Research | Arlington, VA

- May 2024 — **Doctoral Student Research Intern.**
Sept 2024 Developed interactive visual analytics tools and conducted data-driven analyses to explore environmental impacts on education outcomes using air quality and national assessment datasets.
Skills: D3.js, React.js, Node.js, Statistical Analysis (Descriptive & Inferential), Data Visualization, API Data Extraction, Clustering Algorithms, Large Scale Data Analysis

Publications

Journal & Peer Reviewed Conference Papers

- Estimating PM2.5 at North Carolina Public School Locations: A Comparative Study of Data Sources and Interpolation Methods**
2025 Rachel Carroll, Paul Bailey, Saugat Pandey, Dana McCalla, and Thomas Snyder
Accepted at Nature Scientific Reports

- Benchmarking Visual Language Models on Standardized Visualization Literacy Tests** [DOI](#)
 2025 Saugat Pandey and Alvitta Ottley
Computer Graphics Forum (CGF). Also in *Proceedings of 27th eg Conference on Visualization (EuroVis)* — (Acceptance Rate: 27%)
- Trustworthy by Design: The Viewer’s Perspective on Trust in Data Visualization** [DOI](#)
 2025 Oen McKinley, Saugat Pandey, and Alvitta Ottley
Proceedings of the ACM CHI Conference on Human Factors in Computing Systems (ACM CHI) — (Acceptance Rate: 24.5%)
- Building and Eroding: Exogenous and Endogenous Factors that Influence Subjective Trust in Visualization** [DOI](#)
 2024 R. Jordan Crouser, Syrine Matoussi, Lan Kung, Saugat Pandey, Oen McKinley, and Alvitta Ottley
IEEE Visualization & Visual Analytics (IEEE VIS) — (Acceptance Rate: 23.2%)
- Do you trust what you see? toward a multidimensional measure of trust in visualization** [DOI](#)
 2023 Saugat Pandey, Oen McKinley, R. Jordan Crouser, and Alvitta Ottley
IEEE Visualization and Visual Analytics (IEEE VIS) — (Acceptance Rate: 25.8%)
- Mini-VLAT: A Short and Effective Measure of Visualization Literacy** [DOI](#)
 2023 Saugat Pandey and Alvitta Ottley
Computer Graphics Forum (CGF). Also in *Proceedings of 25th eg Conference on Visualization*
Best Paper Award (EuroVis 2023) — (Acceptance Rate: 27%)
- Workshop Papers and Lightly-Reviewed Articles**
- Visualization Literacy or Skillset? Beyond the Analogy to Textual Literacy**
 2025 Mara Solen, Saugat Pandey, Firas Moosvi, Alvitta Ottley, and Tamara Munzner
To appear @ IEEE VIS Workshop on Visualization for Communication (VisComm) 2025
- User Engagement with COVID-19 Visualizations on Twitter** [DOI](#)
 2023 Robert Kasumba, Saugat Pandey, Vishesh Patel, Micah Wolfson, and Alvitta Ottley
IEEE VIS Workshop on Visualization for Communication (VisComm) 2023

Presentations

- 2025 Presented paper titled “Benchmarking Visual Language Models on Standardized Visualization Literacy Tests” at EuroVIS 2025 (Luxembourg City, Luxembourg)
- 2025 Invited presentation on “Visualization Library and Data, Design, and LLM” at the St. Louis Medical Librarians (SLML) Annual Awards Ceremony (St. Louis, MO)
- 2023 Presented paper titled “Mini-VLAT: A Short and Effective Measure of Visualization Literacy” at EuroVIS 2023 (Leipzig, Germany)
- 2022 Presented paper titled “User Engagement with Covid-19 Visualizations on Twitter” at IEEE VIS Workshop on Visualization for Communication 2023 (Oklahoma City, OK)
- 2018 Poster Presentation, Midstates Consortium for Math and Science at Washington University in St. Louis

Academic Service

Organizing Committee

Visualization for Communication (VisComm) Workshop @ IEEE VIS 2025
(Organizing Committee Member and Primary Reviewer)
 Visualization in Data Science (VDS) @ IEEE VIS 2024 *(Web Chair and Paper Session Chair)*

Journal/Conference Reviewer

Nature Scientific Reports (2026)
 International Journal of Data Science and Analytics (2026)
 ACM Conference on Human Factors in Computing Systems (CHI) 2025
 IEEE Visualization Conference (VIS) 2026, 2025, 2024
 Visualization in Data Science (VDS) @ IEEE VIS 2024
 IEEE Pacific Visualization Conference (PacificVis) 2023
 Visualization for Communication (VisComm) Workshop @ IEEE VIS 2023, 2022

Professional & Leadership Experience

- Summer 2025 **Community Intern Captain**, *Adobe Research*, Seattle, WA.
- 2024 **President**, *Association of Graduate Engineering Students (AGES)*, Washington University in St. Louis.
- 2023-2024 **Consultant**, *The Biotechnology and Life Science Advising (BALSA)*, St. Louis, MO.
- 2019-2021 **Co-Founder & President**, *Beloit Investment Club*, Beloit College.
- 2019 **Funding Board Director**, *Beloit Student Government*, Beloit College.