

Saugat Pandey

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Education

- 2021–present **PhD, Computer Science & Engineering**, *Washington University in St. Louis*, Missouri, USA.
2017–2021 **Bachelor of Science, Computer Science & Mathematics**, *Beloit College*, Wisconsin, USA.

Research Experience

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

November 2021 – present **Graduate Research Assistant.**

- Collaborate in the design and development of visualization tools, focusing on enhancing user data visualization skills and apply statistical analysis to investigate how human perception influences visualizations.
- Provide design guidelines to visualization experts for creating visualizations for effective communication.
- Conduct research on the application of visualizations in real-world scenarios, leveraging cutting-edge AI/ML techniques such as Computer Vision and Large Language Models (LLM).

PI: Dr. Alvitta Ottley

The Brent Lab @ Washington University

August 2021 – October 2021 **Graduate Research Assistant.**

- Developed an automated tool to generate image masks for *Cryptococcus neoformans* images.
- Trained a convolutional-based deep model (CNN) using these masks.

PI: Dr. Michael Brent

Publications

In Conference Proceedings

- 2024 R. Jordan Crouser, Syrine Matoussi, Lan Kung, **Saugat Pandey**, Oen G. McKinley, and Alvitta Ottley. Building and eroding: Exogenous and endogenous factors that influence subjective trust in visualization. *IEEE VIS (In Submission)*, 2024.
- 2023 **Saugat Pandey** and Alvitta Ottley. Mini-vlat: A short and effective measure of visualization literacy. volume 42. *Computer Graphics Forum, Wiley Online Library* 🏆, 2023.
- 2023 **Saugat Pandey**, Oen G. McKinley, R. Jordan Crouser, and Alvitta Ottley. Do you trust what you see? toward a multidimensional measure of trust in visualization. *IEEE VIS*, 2023.

Workshop Papers

- 2022 Robert Kasumba, **Saugat Pandey**, Vishesh Patel, Micah Wolfson, and Alvitta Ottley. User engagement with covid-19 visualizations on twitter. *Visualization for Communication (VisComm), IEEE VIS*, 2022.

Awards & Honors

- May 2023 Earned **top 15-20% Departmental Honors** through annual review consensus at Washington University in St. Louis.
- March 2023 **Best Paper Award** for "Mini-VLAT: A Short and Effective Measure of Visualization Literacy" at EuroVIS 2023 (Leipzig, Germany).
- January 2020 **Walter S. Haven Physics/Astronomy Prize** at Beloit College, Wisconsin

Presentations

- May 2023 Presented paper titled "Mini-VLAT: A Short and Effective Measure of Visualization Literacy" at EuroVIS, 2023
- October 2022 Presented paper titled "User engagement with covid-19 visualizations on twitter" at VisComm workshop (IEEE VIS), 2022
- October 2018 Midstates Consortium for Math and Science, Washington University in St. Louis

Programming skills

- Languages Python, JavaScript, R, JAVA, SQL
- Libraries D3.js, Plotly.js, tensorflow, keras, PyTorch, scikit-learn, OpenCV
- Other Tools MySQL, AWS, Git, Django, Flask, Tableau, Power BI

Service & Activities

- July 2022 - **Reviewer**, *VisComm 2022 & 2023 (IEEE VIS) & PacificVIS 2023*.
Present
- May 2023 - **Consultant**, *The Biotechnology and Life Science Advising (BALSA) Group*.
Present
- May 2024 - **President**, *Association of Graduate Engineering Students*, Washington University in St. Louis.
Present
- 2019 - 2021 **Co-Founder & President**, *Beloit Investment Club*, Beloit College.

Teaching Experience

- 2018 - 2021 **Undergraduate Teaching Assistant**, *Beloit College*.
Courses: Introduction to Object-Oriented Programming, Data Structure & Algorithms, Discrete Structures, Computer Architecture, and Physics 101