Amit Jena

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Research interest

Broadly–Designing/building/evaluating user interfaces and information visualisations for the masses.

Lately–Qualitative study to understand the visualisation design process by novice and expert designers; communicating uncertainty to non-experts through visualisation.

I am interested in how people interpret visualisations, and how visualisations can be used for communicating complex information.

Employment

2018–Present **Visualisation Designer**, **Freelancing**.

Design: My projects include both web-based interactive visualisations, frequently using a storytelling technique to show insights into complex data and static visualisations that typically allow a bit more freedom in their design.

Analytics: I create dashboards for interactive data visualisation using Tableau.

Education

2017–Present **PhD**, **HCI and Visual Analytics**, **IITB-Monash Research Academy**.

Joint PhD: IIT Bombay, India and Monash University, Australia

Advisors: Venkatesh Rajamanickam, Tim Dwyer, Ulrich Engelke, Cecile Paris

Thesis (tentative): Deep user models for visual analytics

2015–2017 **M.Tech**, **Computer Science and Engineering**, **IIIT-Bhubaneswar, India**.

Advisor: Rakesh Chandra Balabantaray

Thesis: Query optimisation

2009–2014 **Integrated M.Sc.**, **Applied Mathematics**, **Central University of Jharkhand, India**.

Advisor: Mukul Priyadarshi

Thesis: Application of Multilayer Neural Network with Backpropagation learning to predict Stock Exchange

Grants

2019-2020 SIGCHI Student Travel Grant for one SIGCHI-sponsored conference.

Service

—— To the research and visualisation community

2019–Present **Data Visualization Society, Diversity Committee, Member**

2019–Present **IIT Bombay ACM SIGCHI Student Chapter, Chair**

—— As a conference workshop organiser

2019 **What Indian HCI Doctoral researchers study?**

Amit Jena, Shimmila Bhowmick

Workshop at IndiaHCI'19 | https://github.com/amitjenaiitbm/IndiaHCI2019

—— As a conference program committee member

2020 India HCI Out-Of-India

2020 ACM CHI Late-Breaking Works

—— As a reviewer (for conferences)

2020 CHI PLAY

2020 Designing Interactive Systems (DIS)

2020 Interaction Design and Children (IDC)

2020 CHI Late-Breaking Works and Alt.CHI

2019 India HCI

2019 IEEE VR

2018 VRST

Teaching

Spring 2020 **Co-Facilitator** for Design Fabrication Workshop
https://info-design-lab.github.io/ma-dfworkshop/
IDC School of Design, IIT Bombay, India

Spring 2016 **Teaching Assistant** for B.Tech Lab, Operating System
IIIT-Bhubaneswar, India

Autumn 2016 **Teaching Assistant** for B.Tech Lab, RDBMS and Compiler Design
IIIT-Bhubaneswar, India

Skills

Technical skills
R, Python, Tableau, JavaScript, CSS3, HTML5, D3.js, p5.js, Matlab, and LaTeX

Design research skills

Design thinking, Experimental design, User research, and Usability evaluation

Design skills

Wireframing, Prototyping, and Visual communication

Publications

[1] Christopher Collins, Natalia Andrienko, Tobias Schreck, Jing Yang, Jaegul Choo, Ulrich Engelke, Amit Jena, and Tim Dwyer. Guidance in the human–machine analytics process. *Visual Informatics*, 2(3):166–180, 2018.

[2] Amit Jena, Chandra Balabantaray, et al. Query optimization using query sequence for hindi-english code-mixed query. In *2nd International Conference on Sustainable Computing Techniques in Engineering, Science and Management (SCESM 2017)*, 2017.

[3] Amit Jena and Rakesh Chandra Balabantaray. Semantic desktop search application for hindi-english code-mixed user query with query sequence analysis. In *2017 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT)*, pages 930–934. IEEE, 2017.

[4] Amit Jena, Ulrich Engelke, Tim Dwyer, Venkatesh Raiamanickam, and Cecile Paris. Uncertainty visualisation: An interactive visual survey. In *2020 IEEE Pacific Visualization Symposium (PacificVis)*, pages 201–205. IEEE, 2020.