Amit Jena

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Research interest

Broadly—Designing/building/evaluating user interfaces and information visualisations for the Emergent Users of Information and Communications Technology (ICTs).

Lately—Trying to investigate if "numbers and charts are a universal language".

I am interested in how people interpret visualisations, and how to design visualisations for the varied usage context and goals.

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 **Joint PhD**, **Data Visualisation and HCI**, **IITB-Monash Research Academy**.

Affiliation: IDC School of Design, IIT Bombay, India and Faculty of IT, 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**
2019–2020   **IIT Bombay ACM SIGCHI Student Chapter, Chair**

——   As a conference workshop organiser

2020   **Towards Designing Visualisations for the Emergent Users of ICTs**
Amit Jena, Seema Krishnakumar, Venkatesh Rajamanickam
Workshop at IndiaHCI'20 | https://amitjenaiitbm.github.io/vis4d/

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

2021   India HCI, Out-Of-India Chair
2021   ACM CHI Late-Breaking Works
2020   India HCI, Out-Of-India Chair
2020   ACM CHI Late-Breaking Works

——   As a reviewer (for journals)

2020   International Journal of Child-Computer Interaction: Special Issue

——   As a reviewer (for conferences)

2020   CHI Late-Breaking Works
2021   CHI: Full Paper
2020   IndiaHCI: Full Paper and SDC
2020   CHI PLAY
2020   Designing Interactive Systems (DIS)
2020   Interaction Design and Children (IDC)
2020   CHI Late-Breaking Works and Alt.CHI
2019   IndiaHCI: Full Paper
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, Git, GitHub, Tableau, JavaScript, CSS3, HTML5, D3.js, p5.js, Matlab, C, C++ and LaTeX

Design Tools

Figma, Sketch, Inkscape, Adobe XD, Illustrator

Design research skills

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

Design skills

Wireframing, Prototyping, and Visual communication

Publications

2021 **Jena, Amit**, Matthew Butler, Tim Dwyer, Kirsten Ellis, Ulrich Engelke, Reuben Kirkham, Kim Marriott, Cecile Paris, Venkatesh Rajamanickam. "The Next Billion Users of Visualization," in IEEE Computer Graphics and Applications, vol. 41, no. 2, pp. 8-16, March-April 2021, doi: 10.1109/MCG.2020.3044071.

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

2018 Collins, Christopher, 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, no. 3 (2018): 166-180.

2017 **Jena, Amit**, 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 RTEICT, pp. 930-934. IEEE, 2017.

2017 **Jena, Amit**, and Chandra Balabantaray. "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.