

# Amit Jena

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Email: [amit.jena@monash.edu](mailto:amit.jena@monash.edu)

Homepage: <https://amitjenaiitbm.github.io/>

## 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.

## 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 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 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, JavaScript, CSS3, HTML5, D3.js, p5.js, Matlab, and  $\text{\LaTeX}$

### 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 Rajamanickam, and Cecile Paris. Uncertainty visualisation: An interactive visual survey. In *2020 IEEE Pacific Visualization Symposium (PacificVis)*. IEEE, 2020.