



# Dr. Shivam Agarwal

## CURRICULUM VITAE

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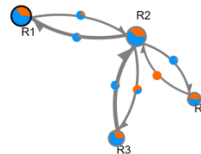
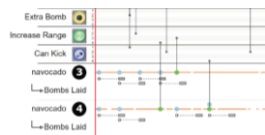
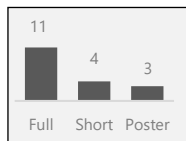
<https://s-agarwl.github.io/>



### Research Activities

My research is about **data visualization, game analytics, and artificial intelligence (AI)**. Generally, I am interested in finding effective visual representations of the data, enabling the exploration of patterns and valuable insights.

- I have contributed to the research field by publishing **18 peer-reviewed publications** and presenting them at various conferences. In first-authored articles, I lead the research projects. For example:



**Flatland Visualization**  
IEEE PacificVis 2022

- I instantiated my research interests in a **PhD Dissertation (magna cum laude)** titled, "*Exploring Complex Group Dynamics: Visual Analysis of Overlapping Groups and Interactions Over Time*".
- I actively provide service to the community and have contributed as a **program committee** member (IEEE VIS – short paper), **student volunteer** (ACM CHI Play, IEEE VIS, and EuroVis), and **external reviewer** (CHI, CHI Play, IEEE VIS).
- I am also working towards building a visualization research community in India: **VisInBharat**.



### Education

2017 – 2023	<b>PhD</b> (Data Visualization)	University of Duisburg-Essen, Germany
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2013 – 2015	<b>Masters</b> (Information Technology)	IIIT Bangalore, India
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2007 – 2011	<b>Bachelors</b> (Computer Science)	United College of Engineering & Research, India.
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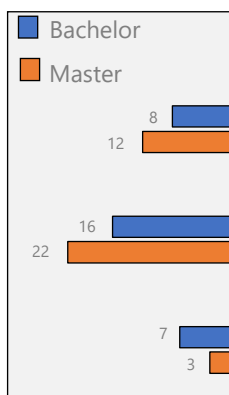


### Awards

- NeurIPS 2020's Flatland competition:** First prize in community contribution category visualizing smart train scheduling.
- VMV 2020:** Best paper award.
- NeurIPS 2019's Pommerman competition:** Community Award to visualize the collaboration and competition among trained AI agents.



### Teaching Supervision and Management



During PhD, I had exciting and challenging opportunities to engage with students.

**Theses:** Supervised student theses for 3 months (**Bachelor**) or 6 months (**Master**) on data visualization related topics.

**Projects:** Actively designed and supervised student projects, mostly to build prototypes and gain insights from data.

**Courses and Seminars:** Managed different courses as a teaching assistant and designed seminars on challenging but interesting topics.



### Technologies

- Web:** Vue.js, D3.js, HTML, JavaScript, and CSS
- Programming Languages:** Python, R, Java, and C
- Tools:** Tableau, Computational Notebooks
- Database:** SQL



### Miscellaneous

- Languages:** English, Hindi, German (A1), and Sanskrit (Learning).
- Hobbies:** Cooking and creating digital story books.



### Work Experience

2022 – present	Research Assistant	University of Bamberg, Germany
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2017 – 2022	Research Assistant	University of Duisburg-Essen, Germany
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2015 – 2017	Software Engineer	IIIT Bangalore, India
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2011 – 2013	Systems Engineer	Infosys Ltd.
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A word cloud visualization of keywords from my research articles (size encodes frequency).