# Adarsh Jamadandi

Research Interests: Graph Representation Learning and

Geometric Deep Learning. Saarland Informatics Campus

Universität des Saarlandes, Saarbrucken Germany, 66123.

# EDUCATION

### Universität des Saarlandes, Saarbrücken, Germany.

November 2020 - Present

Masters in Computer Science Current GPA (ECTS): 1.9/5.0.

### B.V.Bhoomaraddi College of Engineering and Technology, Hubli, India.

August, 2014 - June, 2018

B.E in Electronics and Communication Engineering. GPA: 8.42/10.0 Advisor: Prof. Uma Mudenagudi.

Bachelor Thesis: Anomaly Detection in Unlabeled Videos.

# WORK EXPERIENCE \_\_\_\_\_

CISPA Nov, 2022 - Present

Research Assistant

Working on improving generalizability of graph neural networks

by tackling problems like over-squashing and over-smoothing.

### Modelling and Simulation Lab, Saarland Informatics Campus.

Nov, 2021 - Jan, 2023.

Research Assistant

Working on modelling molecular spectra using graph neural networks.

# KLE Technological University, Hubli, India.

April, 2019 - April, 2020

Research Associate

Responsibilities: Deep Learning for Underwater Image Enhancement.

### Publications

#### 6. SoLAR: Surrogate Label Aware Graph Rewiring for Graph-Task Alignment.

Celia Rubio-Madrigal\*, Adarsh Jamadandi\* and Rebekka Burkholz.

\*equal contributions. Pre-Print

(Under-review), 2024.

## 5. Spectral Pruning Against Over-Squashing and Over-Smoothing.

Adarsh Jamadandi, Celia Rubio-Madrigal and Rebekka Burkholz.

Pre-Print

(Under-review), 2024.

### 4. Graph of Thrones: Adversarial Perturbations dismantle Aristocracy in Graphs.

Adarsh Jamadandi and Uma Mudenagudi.

AAAI, Student Poster, 2021.

Extended Version in Differential Geometry meets Deep Learning Workshop, (NeurIPS), 2020.

#### 3. Probabilistic Word Embeddings in Kinematic Space

Adarsh Jamadandi, Rishabh Tigadoli, Ramesh Tabib and Uma Mudenagudi. International Conference on Pattern Recognition (ICPR), 2020.

#### 2. Exemplar Based Underwater Image Enhancement augmented

# by Wavelet Corrected Transforms

Adarsh Jamadandi and Uma Mudenagudi .

Computer Vision and Pattern Recognition (CVPR Workshop, Oral), 2019.

# 1. Learning Hierarchical Representations in Kinematic Space.

Adarsh Jamadandi and Uma Mudenagudi .

Graph Representation Learning Workshop,

Neural Information Processing Systems (NeurIPS), 2019.