Adarsh Jamadandi

Curriculum Vitae (10 September 2025)

CNRS Doctoral Researcher
Institut de Recherche en Informatique et Systèmes Aléatoires (IRISA)
263 Avenue du Général Leclerc, Rennes, France.

✉ Email ⌂ Personal Website 🎓 Google Scholar in LinkedIn

Research interests

Graph Machine Learning • Geometric Deep Learning •

Education

Sept 2025–present	**Ph.D.** in Computer Science at IRISA, France. *Node features in Graph Machine Learning: Benchmarks and New models.* Advisor: Nicolas Keriven.
Nov 2020–August 2024	**M.Sc** in Computer Science at Universität des Saarlandes, Germany. *On the Importance of Graph-Task Alignment in Graph Neural Networks.* Advisor: Rebekka Burkholz.
2014–2018	**B.Eng** in Electronics and Communication at KLE Technological University, India. *Anomaly Detection in Unlabelled Videos.* Advisor: Uma Mudenagudi.

Work Experience

March 2025–Aug 2025	**Research Assistant** at SprintML Lab, CISPA, Saarland, Germany. *Memorization in Graph Neural Networks.*
Nov 2022–Oct 2024	**Research Assistant** at RelationalML Lab, CISPA, Saarland, Germany. *Mitigating Over-squashing and Over-smoothing via Graph Rewiring.*
March 2025–Aug 2025	**Research Assistant** at Modeling and Simulation Lab, Germany. *Modeling Molecular Spectra using GNNs.*
April, 2019–April 2020	**Research Associate** at KLE Technological University, India. *Deep Learning for Underwater Image Enhancement.*
Feb, 2017–May, 2020	**Chief Technology Officer and Co-Founder** at Silicon14/Tweak Labs Inc. *Low cost hardware augmentations/sensors for embedded systems and IoT.*

Publications

2025

Memorization in Graph Neural Networks.
Adarsh Jamadandi, Jing Xu, Adam Dziedzic and Franziska Boenisch.
Preprint.

2025

GNNs Getting ComFy : Community and Feature Similarity Guided Rewiring.
Celia Rubio-Madrigal*, **Adarsh Jamadandi***, and Rebekka Burkholz.
equal contributions. International Conference on Learning Representations, **ICLR,2025**.

2024

Spectral Pruning Against Over-Squashing and Over-Smoothing.
Adarsh Jamadandi*, Celia Rubio-Madrigal* ,and Rebekka Burkholz.
equal contributions. Advances in Neural Information Processing Systems, **NeurIPS, 2024.**

2021

Graph of Thrones : Adversarial Perturbations dismantle Aristocracy in Graphs.
Adarsh Jamadandi and Uma Mudenagudi. **AAAI, Student Poster.**

2020

Probabilistic Word Embeddings in Kinematic Space.
Adarsh Jamadandi, Rishabh Tigadoli, Ramesh Tabib and Uma Mudenagudi.
International Conference on Pattern Recognition (**ICPR**).

2019

Exemplar Based Underwater Image Enhancement augmented by Wavelet Corrected Transforms.
Adarsh Jamadandi and Uma Mudenagudi .
Computer Vision and Pattern Recognition (**CVPR** Workshop, Oral).

Invited Talks

2025

CEVI Vision++ Talk Series, India.
Learning on Graphs: Strategies for Improving and Understanding Generalization in Graph Neural Networks.

2024

Neptune AI Video Interview.
How spectral graph pruning can help address over-squashing and over-smoothing?

2024

Helmholtz AI Conference, Dusseldorf.
How to mitigate both over-squashing and over-smoothing in GNNs?

Academic Service

2025

Reviewer for conference Advances in Neural Information Processing Systems (**NeurIPS**).

2025

Reviewer for conference Association for the Advancement of Artificial Intelligence (**AAAI**).

Selected Awards and Honors

2019   **Adarsh Jamadandi**, Sujata C, Uma Mudenagudi and Ashok Shettar,
System and Method for Video Summarization **201941003790, Patent Pending**.

2019   **Adarsh Jamadandi** and Samar A M, Accexlron - A Rapid Prototyping Development Board.
Best US-based Project by Hackster.io.