Adarsh Jamadandi

Curriculum Vitae (19th December 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 LinkedIn

Research interests

Graph Machine Learning • Generative Models for Graphs

Education

Sept 2025–present — **Ph.D.** in Computer Science at IRISA, France.
Node features in Graph Machine Learning: Benchmarks and New models.
Advisors: Aline Roumy and 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.
Advances in Neural Information Processing Systems, **NeurIPS, 2025.**

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 Graph 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, 2021.**

2019 **Exemplar Based Underwater Image Enhancement augmented by Wavelet Corrected Transforms.**
Adarsh Jamadandi and Uma Mudenagudi .
Computer Vision and Pattern Recognition (**CVPR, 2019** Workshop, Oral).

Invited Talks

2025 **NeurIPS in Paris, Sorbonne University**
Memorization in Graph Neural Networks.

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

October,2025 **NeurIPS Scholar Award**
Financial Assistance covering registration (accepted), and accommodation (declined) to present research at San Diego.

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.