

# 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, **AccexIron - A Rapid Prototyping Development Board.**  
*Best US-based Project by Hackster.io.*