

## Short profile format

### 1. Brief self Introduction



**Dr. Kavya Johny** is currently working as a research associate in Advanced Centre for Atmospheric Radar Research(ACARR), Cochin University of Science and Technology(CUSAT), Cochin, Kerala, India. She received Ph.D. degree in Computer Science and IT from Amrita Vishwa Vidyapeetham in 2021. Her research interests include Numerical Weather Prediction and Modelling, Artificial Intelligence Techniques in hydro-climatology and Data Analysis, Extreme Weather Prediction. She has completed B.Tech and M.Tech degrees in Computer Science and Engineering from Mahatma Gandhi University. She obtained the second rank for MTech at Mahatma Gandhi University. She has an experience in teaching as an Assistant Professor for six years. She has published 7 Scopus indexed journals and 6 international conference papers She is an active reviewer of the International Journal of Climatology, Natural Hazard and Atmospheric Science Letters –Royal Meteorological Society. She received the prestigious award “Highest Committed Student Branch Activist” under CSI Academic Award at the CSI Annual Convention 2020.

### 2. Contact Info

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### 3. Education

COURSE	INSTITUTION/ COLLEGE	UNIVERSITY/ BOARD	PERCENTAGE OBTAINED	YEAR OF PASSING
<b>Ph.D.</b> (Computer Science - Full time)	Amrita School of Arts and Sciences, Kochi	Amrita Vishwa Vidyapeetham	<b>PhD</b>	2017 – 2021
<b>M.Tech</b> (Computer Science & Engineering)	Viswajyothi College of Engineering and Technol- ogy, Vazhakulam, Kerala, India	Mahatma Gandhi, University, Kerala	<b>76%(Second rank in MG University)</b>	2011
<b>B. Tech</b> (Computer Science & Engineering)	SaintGits College of Engi- neering, Kottayam	Mahatma Gandhi University, Kerala	<b>73% (First Class)</b>	2009

<b>HSE (XII)</b>	Nirmala higher secondary school Aluva	Higher Secondary Education Board, Kerala	<b>85% (Distinction)</b>	2005
<b>SSLC</b>	Nirmala higher secondary school Aluva	Kerala Board of Public Exam	<b>84% (Distinction)</b>	2003

#### 4. Experience

- Working as a **Research Associate** in **Advanced Centre for Atmospheric Radar Research (ACARR), CUSAT** for THUNDER project under Ministry of Earth Science (MOES), Govt. of India from 1<sup>st</sup> November 2021.
- Worked as **Assistant Professor** at (**Sree Narayana Guru Institute of Science & Technology**) **SNGIST College of Engineering & Technology** (from 20-12-2011 to 26-7-2017 resigned on 8-11-2018)
- worked as a **Teaching Assistant** in **Viswajyothi College of Engineering and Technology, Vazhakulam, Kerala**
- worked as a **Lecturer** for six months (August 2009-Dec 2009) in **St.Xaviers College, Aluva, Kerala, India.**

#### 5. Awards and Achievements

- Academic Award at the CSI Annual Convention 2020 and awarded during the CSI- 2020 Annual Convention held during 16th through 18th January 2020 at KIIT University, Bhubaneswar on the theme “Digital Democracy – IT for Change”.
- **NET** qualified December 2018 for Assistant Professor
- Got **second rank** in **MG University** for **M.Tech.**
- **CAT** qualified 2008-2009
- Got the **merit scholarship** for pursuing undergraduate course in engineering under **Saintgits Merit Scholarship scheme-2005** during 2005-2009.
- Selected as **inauguration co-ordinator** of Nakahatra 2008(Inter College Fest of Engineering College).
- got campus placement in a multinational company-**IBS.**
- **Second Prize** in the event **Shastrapatra-Paper Presentation** conducted as part of the National Level Technical Festival, Bodhi 2011 by Viswajyothi College of Engineering and Technology,

Vazhakulam on April 1-2, 2011.

- **Second Prize** in Revenue District Kuchupudy Competition.
- **Second Prize in National Level and Cultural Fest Azure** held at AmalJyothi College of Engineering and Technology, Kanjirappilly.
- Excellent Performance in the **STARWARS** competition organized by **KAIRALI TV** during the year 2007-08 representing SaintGits College of Engineering, Pathamuttom.
- **District and State level** group performances winners

## 6. Research Interests

Numerical Weather Prediction and Modelling, Artificial Intelligence Techniques in hydro-climatology and Data Analysis, Extreme Weather Prediction..

## 7. Research Projects

- **Currently doing THUNDER** project granted by Ministry of Earth Science (MOES), Govt. of India under Dr.Manoj.M.G, Scientist-D, ACARR
- **“Multiscale Characterization of Hydro-Climatic Variables: A Hybrid Decomposition Based Artificial Intelligence Approach for Rainfall Prediction”** for completion of Ph.D. in Computer Science.

## 8. Significant Contributions

NA

## 9. Publications

### 9.1 Journals

- Johny, K., Pai, M. L., & Adarsh, S.” A multivariate EMD-LSTM model aided with Time Dependent Intrinsic Cross-Correlation for monthly rainfall prediction.” Applied Soft Computing. (Scopus, Impact Factor:8.263, Q1)
- Johny, K., Pai, M. L., & Adarsh, S.” Time Dependent Intrinsic Cross-correlation approach for multiscale teleconnection analysis for monthly rainfall of India” Meteorology and Atmospheric Physics. (Scopus, Impact Factor:2.209, Q2)
- Johny, K., Pai, M.L. & Adarsh, S. (2022). Investigating the multiscale teleconnections of Madden–Julian oscillation and monthly rainfall using time-dependent intrinsic cross-correlation. Natural Hazards. (Scopus, Impact Factor :3.102, Q1)
- Johny, K., Pai, M. L., & Adarsh, S. (2020). Adaptive EEMD-ANN hybrid model for

Indian summer monsoon rainfall forecasting. *Theoretical and Applied Climatology*, 1-17. (Scopus, Impact Factor:3.375, Q2)

- Johny, K., Pai, M. L., & Adarsh, S. (2020). An investigation on drought teleconnection with Indian ocean dipole and El-nino southern oscillation for peninsular India using time dependent intrinsic correlation. In *IOP Conference Series: Earth and Environmental Science* ,491(1), 012007). (Scopus, Citescore 0.44, Q4)
- Johny, K., Pai, M. L., &Adarsh, S. (2019). Empirical forecasting and Indian Ocean dipole teleconnections of south–west monsoon rainfall in Kerala. *Meteorology and Atmospheric Physics*, 131(4), 1055-1065. (Scopus, Impact Factor:2.209, Q3)
- Johny, K., & Jose, T. (2011, September). Algorithms for efficient web service selection with different constraints. In *International Conference on Parallel Distributed Computing Technologies and Applications* (pp. 293-300). Springer, Berlin, Heidelberg
- Johny, K. (2011). A New Broker-Based Architecture for TQoS Driven Web Services Composition. In *Proceedings of International Conference on Advances in Computer Engineering*, IDES digital library, (pp. 10-12).
- Johny, K. (2011). A Broker Based Architecture for Quality-Driven Web Services Composition using a Hybrid Genetic Algorithm. In *International Conference on Emerging Technology Trends (ICETT) 2011 Proceedings* published by International Journal of Computer Applications (IJCA)

## 9.2 Books and Book Chapters

NA

## 9.3 Reports with ISSN/ISBN number

NA

## 9.4 Conference Publications

- Johny, K., Pai, M. L., & Adarsh, S. (2019). “An Adaptive EEMD-ANN Hybrid Model for Indian Summer Monsoon Rainfall Prediction. Accepted and presented in Maricon 2019 organized by School of Marine Sciences, CUSAT.
- Johny, K., Pai, M. L., & Adarsh, S. (2019). “An Investigation on Drought Teleconnection with Indian Ocean Dipole and El-Nino Southern Oscillation for Peninsular India Using Time Dependent Intrinsic Correlation”. Presented in an international conference(scopus) ICMSC (2019) hosted by TKM College of Engineering, Kollam.
- Johny, K., Pai, M. L., & Adarsh, S. (2019).” Adaptive EEMD-ANN hybrid model for South West Monsoon Rainfall Forecasting of Kerala”. Presented in the Water Future Conference-2019,” Towards a Sustainable Water Future”, held at Bengaluru, organized by Divecha Centre for Climate Change, Indian Institute of Science and Sustainable Water Future Programme
- Johny, K. (2012). Biological Sequence Alignment Using Wormhole-Switched Network-onchip”, In *The International Conference on Recent Innovation in Technology (ICRIT2012)*.

- Johny, K. (2011). A New Broker-Based Architecture for TQoS Driven Web Services Composition. In Proceedings of International Conference on Advances in Computer Engineering.
- Johny, K. (2011). A Broker Based Architecture for Quality-Driven Web Services Composition using a Hybrid Genetic Algorithm. In International Conference on Emerging Technology Trends (ICETT) 2011.
- Attended an international conference “Geology Emerging Methods and its Applications” GEM 2019 organized by the department of geology, Christ College(Autonomous), Irinjalakuda
- Attended World Ocean Science Congress 2019 in Andhra University

## 9.5 Popular Articles

NA

## 10. Popular Lectures/Invited Talks

- Speaker for a session in the 5 Day Online Faculty Development Programme “Machine Learning using Python” from October 18 – 22, 2021 organized by the Department of Computer Science and Engineering, Sree Buddha College of Engineering, Pattoor.
- Speaker for seminar on topic “Research Methodology “for the Computer Society of India event conducted by Amrita School of Arts and Sciences, Kochi.

## 11. Guidance

Phd: (nos)

PG/UG : (nos)

NA

## 12. Countries Visited as part of Professional Career

NA

## 13. Expert Member in Research Committees

NA

## 14. Any other information

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- [Kavya Johny - Google Scholar](https://scholar.google.com/citations?user=Kavya-Johny)

