# Dr. Vikram Garg

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in vikram-garg-6222ba5b

## **Employment History**

December 2023 – July29, 2024

Assistant Professor, Maulana Azad National Institute of Technology Bhopal.

August 2022 – December 2023

Assistant Professor (Contarct), Maulana Azad National Institute of Technology Bhopal.

July 2016 – July 2017

Assistant Professor, Sagar Institute of Science & Technology (SIS-Tec) Bhopal.

August 2010 – June 2016

Assistant Professor, Lakshmi Narain College of Technology Excellence Bhopal

### **Education**

2017 - 2022

Ph.D., ABV- Indian Institute of Information Technology & Management Gwalior Thesis title: Cooperative Multi-target Searching and Tracking using Nature-Inspired Algorithms

Thesis Supervisor: Prof. Anupam Shukla and Prof. Ritu Tiwari

2010 - 2014

M.Tech. (Computer Science & Engineering), Barkatullah University Institute of Technology Bhopal.

Thesis title: Privacy Preservation in Association Rule Mining using Representative Rule.

2004 - 2008

■ B.E.(Computer Science & Engineering), Rajiv Gandhi Proudyogiki Vishwavidyalaya Bhopal.

### **Research Publications**

#### **Journal Articles**

- V. Garg, "E2rgwo: Exploration enhanced robotic gwo for cooperative multiple target search for robotic swarms," *Arabian Journal for Science and Engineering*, vol. 48, no. 8, pp. 9887–9903, 2023.
- V. Garg, A. Shukla, and R. Tiwari, "Aerpso—an adaptive exploration robotic pso based cooperative algorithm for multiple target searching," *Expert Systems with Applications*, vol. 209, p. 118 245, 2022.
- V. Garg, R. Tiwari, A. Shukla, and J. Dhar, "A distributed cooperative approach for dynamic target search using particle swarm optimization with limited intercommunication," *Arabian Journal for Science and Engineering*, vol. 47, no. 8, pp. 10 623–10 637, 2022.
- V. Garg, "Cooperative multi-robot target searching and tracking using velocity inspired robotic fruit fly algorithm," *SN Computer Science*, vol. 2, no. 6, p. 474, 2021.
- V. Garg, A. Singh, and D. Singh, "A hybrid algorithm for association rule hiding using representative rule," *International Journal of Computer Applications*, vol. 97, no. 9, 2014.

### **Conference Proceedings**

- V. Garg, R. Tiwari, and A. Shukla, "Comparative analysis of fruit fly-inspired multi-robot cooperative algorithm for target search and rescue," in 2022 IEEE World Conference on Applied Intelligence and Computing (AIC), IEEE, 2022, pp. 444–450.
- V. Garg, A. Singh, and D. Singh, "A survey of association rule hiding algorithms," in 2014 Fourth International Conference on Communication Systems and Network Technologies, IEEE, 2014, pp. 404–407.

## Thesis and Project Guided

#### Ph.D. Thesis

### **Projects**

Attendance System Application https://github.com/VinayBhupelli/attendance-system-

Image-Captioning-using-Deep-Learning | https://github.com/suhaanibatra/Image-Captioning-

using-Deep-Learning

### **Skills**

Languages Strong reading, writing and speaking competencies for English and Hindi.

Coding | Java, PHP, Python, sql, 上上X, ...

Databases Mysql, Postgresql, sqlite.

Web Dev HTML, css, JavaScript, Apache Web Server, Tomcat Web Server.

Misc. Academic research, teaching, training, consultation, LTFX typesetting and publishing.

### **Miscellaneous**

### **Roles and Responsibilities**

Since December 2023 Exam Coordinator of CSE Department & Centre of Artificial Intelligence.

Member of DUPC Committee of CSE Department & Centre of Artificial Intelligence.

■ Placement Cooordinator of CSE Department & Centre of Artificial Intelligence.

Since April 2024 Memeber of Rajbhasha Samiti from Centre of Artificial Intelligence.

### Training, Workshops and Conferences

2022 IEEE World Conference on Applied Intelligence and Computing, Presented my research paper "Comparative Analysis of Fruit Fly-Inspired Multi Robot Cooperative Algorithm for Target Search and Rescue".

Attended a 5-day workshop on "**Robotics and Intelligent System**" at PDPM-Indian Institute of Information Technology, Design & Manufacturing, Jabalpur.

Attended a 5-day workshop on "VLSI Chip Design Hands on using open-source EDA" at ABV- Indian Institute of Information Technology and Management, Gwalior (2019).

Attended a 5-day workshop on "Statistics and Research Methodology: An Exploration with a special focus on Multivariate Statistical Techniques" at ABV- Indian Institute of Information Technology and Management, Gwalior (2018).

Presented my research paper "A Survey of Association Rule Hiding Algorithms" at IEEE International Conference on Communication System and Network Technologies (CSTN), 2014.