# Dr. Srikanth Baride

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Google Scholar — LinkedIn — GitHub — Website — ORCID

# **Profile Summary**

Postdoctoral Researcher (Ph.D., IIIT-Delhi 2024) specializing in Reinforcement Learning, AI for Healthcare, and Spatial Data Mining. Leading NIH-funded biomedical informatics projects.

# Research Summary

My doctoral research focused on spatial data mining with an emphasis on colocation pattern mining. I developed novel frameworks such as Range Colocation Mining, High-Utility Subgraph Pattern Mining, and Dynamic Colocation Pattern Mining. These approaches addressed scalability, utility optimization, and temporal evolution in spatial datasets, contributing to real-world geospatial analytics.

#### Education

- Ph.D., Computer Science & Engineering, IIIT-Delhi, India (2024), CGPA: 8.11
- M.Tech., Computer Science & Engineering, NIT Hamirpur, India (2012), CGPA: 7.76
- B.Tech., Information Technology, J.B. Institute of Engineering Technology, JNTU Hyderabad, India (2010), Score: 73.61%

## **Publications**

- [1] Draft book manuscript (in preparation): Reinforcement Learning Fundamentals: From Theory to Practice, with accompanying GitHub resources https://github.com/srikanthbaride/Reinforcement-Learning-Explained-Code.
- [2] Baride, S., Saxena, A.S., Goyal, V. "Efficiently Mining Colocation Patterns for Range Query." Big Data Research, 31:100369 (Feb 2023).
- [3] Khare, A., Goyal, V., Baride, S., Prasad, S.K., McDermott, M., Shah, D. "Distributed Algorithm for High-Utility Subgraph Pattern Mining Over Big Data Platforms." *IEEE HiPC*, pp. 263–272 (Dec 2017).
- [4] Barnwal, R.P., Baride, S., Majumder, S., Ghosh, S. K. "A Density-Based Algorithm for Detecting Anomalous Trajectories." In *MicroCom* (2016).
- [5] Baride, S., Dutta, K. "A Cloud-Based Software Testing Paradigm for Mobile Applications." ACM SIGSOFT Softw. Eng. Notes, 36(3):1–4 (2011).

### Professional Experience

• Postdoctoral Researcher, University of South Dakota (2025–Present)

- Visiting Assistant Professor, University of South Dakota (2024–2025)
- Digital Innovation Engineer Data Science, Buckman (2023–2024)
- Senior Project Fellow, CSIR-CMERI (2023–2024)
- System Engineer, Infosys (2013–2014)

# Teaching Experience

- Undergraduate: Introduction to Programming, Distributed Systems, Operating systems
- Graduate: Artificial Intelligence, Reinforcement Learning, Data Mining, Big Data Analytics

### Awards and Fellowships

- Visvesvaraya Ph.D. Fellowship (2016–2020), Ministry of Electronics & Information Technology, Govt. of India.
- MHRD Scholarship (2010–2012) for M.Tech, Govt. of India.
- Best Project 10th National Children's Science Congress, Govt. of India (2003).

#### Technical Skills

- Languages: C, C++, Java, Python, R, SQL, PHP, JavaScript
- Frameworks: Scikit-learn, NumPy, Pandas, Matplotlib, J2EE, JSP
- Databases: Oracle, MySQL, PhpMyAdmin
- Tools: Visual Studio, Eclipse, SystemC, Unix/Linux, MS Office
- Technologies: HTML, CSS, Web Services, REST APIs, Cloud Infrastructure

# **Invited Talks**

• "Beyond Boundaries: Advancing Colocation Pattern Mining in Spatial Data." Brown Bag Lecture, USD (April 29, 2025)

#### Reviewing and Mentoring

- Reviewed a research manuscript for *GeoInformatica* (2025), demonstrating subject-matter expertise in geospatial computing and contribution to academic peer review.
- Mentored multiple reinforcement learning projects as part of the Applied Reinforcement Learning course, guiding students through practical implementation and research thinking.

## Outreach & Volunteering

- Art of Living Foundation (2012–present): Yoga/meditation teacher, trauma relief facilitator.
- Founded student wellness & meditation club at IIIT-Delhi.