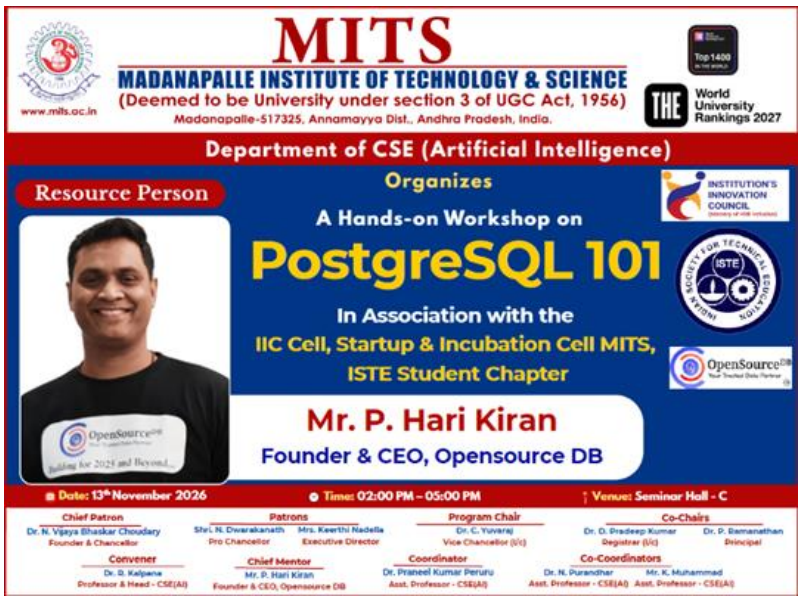
A Report on Hands-on Workshop on "PostgreSQL 101"
Organized by
Department of Computer Science & Engineering (Artificial Intelligence) & OpenSource DB
In association with Institute Innovation Council, Startup & Incubation Cell, & ISTE
On 13.11.2026



Report Submitted by: Dr Praneel Kumar Peruru, Assistant Professor of CSE (AI),

Venue: Seminar Hall - A
Time: 2:00 PM–5:00 PM
Mode of Conduct: Offline
Attendees Count: 70
Report Received on 18.11.2026

The Department of Computer Science and Engineering (Artificial Intelligence) at Madanapalle Institute of Technology & Science (MITS) organised a hands-on workshop titled "PostgreSQL 101" to provide students with practical exposure to modern database technologies.

The workshop was led by **Mr. P. Hari Kiran, Founder & CEO, OpenSource DB**. The sessions covered the fundamentals and practical applications of PostgreSQL, along with its integration with emerging Artificial Intelligence technologies, including vector databases, embeddings, and Retrieval-Augmented Generation (RAG).

The workshop provided students with valuable insights into industry practices and the growing role of database technologies in AI-driven applications. It also offered an opportunity to interact with an industry expert and gain practical technical knowledge.

The programme was organised under the guidance of Dr. R. Kalpana, Professor & Head, Department of CSE (AI), with Dr. Praneel Kumar Peruru as Coordinator and Dr. N. Purandhar and Mr. K. Mahammad as Co-Coordinators. The event was conducted in association with the Institution's Innovation Council, Startup & Incubation Cell, MITS, and the ISTE Student Chapter.



Learning Outcomes:

After attending the workshop, participants were able to:

- **Understand PostgreSQL Fundamentals:** Explain the basic concepts, features, architecture, and applications of PostgreSQL.
- **Perform Database Operations:** Create databases and tables, execute SQL queries, and perform basic database management operations using PostgreSQL.
- **Apply PostgreSQL in Practical Scenarios:** Demonstrate hands-on skills in working with PostgreSQL through practical database exercises.
- **Understand AI Integration with PostgreSQL:** Explain the role of vector databases and embeddings in AI applications and understand their implementation using PostgreSQL and pgvector.
- **Explore AI-Powered Applications:** Understand how PostgreSQL can support Retrieval-Augmented Generation (RAG) applications and AI-driven solutions.

Vote of Thanks:

It is my privilege and honour to propose the Vote of Thanks on the occasion of the Hands-on Workshop on "PostgreSQL 101", organized by the Department of Computer Science and Engineering (AI) & OpenSource DB Pvt Ltd, Hyderabad in association with Institute Innovation Council, Startup & Incubation Cell, & ISTE.

First and foremost, I express my sincere gratitude to our distinguished resource person, Mr. P. Hari Kiran, Founder & CEO of OpenSource DB Private Limited, Hyderabad for sparing his valuable time and sharing his extensive knowledge and professional experience with our students. Sir, your insightful presentation on PostgreSQL, its advantages and career opportunities has provided our students with valuable industry exposure and inspiration.

On behalf of the Department of Computer Science and Engineering (AI), we express our heartfelt gratitude to the Management of **MITS Deemed to be University** for their constant encouragement and support in organizing Hands-on Workshop on "PostgreSQL 101" on 13.11.2026.

I extend my heartfelt thanks to our respected Vice Chancellor (I/c), Dr. C. Yuvaraj, for his valuable guidance and encouragement. I also express my sincere gratitude to our Registrar (I/c), Dr. D. Pradeep Kumar, and Principal, Dr. P. Ramanathan, for their continuous support and encouragement.

I would also like to thank Dr. R. Kalpana, Professor & HOD of CSE (AI), Dr. K Chokkanathan, Associate Professor of CSE (AI), Dr. N. Purandhar, Assistant Professor of CSE (AI), Mr. K Mahammad, Assistant Professor of CSE (AI), for their valuable coordination and efforts in making this programme successful. Finally, I extend my sincere thanks to all the faculty members of the department, organizing team, non-teaching staff and students for their active participation and cooperation.