

# Nagasai Velpuri

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## Summary of Qualifications

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- Professional Database Administrator with 3.4 years of experience and a Postgraduate degree in AI and ML, equipped with essential competencies in statistics, predictive analysis, and advanced analytics.
- Skilled in query optimization and performance tuning for sources, targets, mappings, and sessions, addressing performance bottlenecks.
- Knowledgeable in SQL Server environments including Security, Scheduled job maintenance and troubleshooting.
- Skilled in applying analytical principles and tools to real-world problems, enhancing decision-making processes within organizations.
- Proficient at implementing OLAP in Hive using HQL, Spark. Comfortable with Unix File Systems and HDFS commands.

## Skills

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### Technical Skills:

Programming Language: SQL, Python, Scala, HiveQL, C++, Java, HTML, competitive programming, MySQL, DevOps.

Tools: SSIS, SSRS, Spark Shell, Linux, VCS-Git, Jenkins, IntelliJ, MS Office, AWS S3, EMR, Glue, Redshift

**Data Oriented Technologies:** Microsoft SQL Server, Big Data, Hadoop, Data Migration, Snowflake, Oracle, Statistics.

**AI/ML Technologies:** Tensorflow, Numpy, Pandas, Matplotlib, Seaborn, Natural Language Processing, RAG

**Other Technologies:** Google Workspace, Microsoft Office (Word, Excel, Power Point), Data structures and Algorithms.

**Methodologies:** Agile, Kanban, SDLC, Confluence, Jira.

## Experience

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**Innova Solutions | Database Administrator** – Hyderabad, India

Mar 2021 – Apr 2023

- Maintained database-related stored procedures and data in an order management solutions project, created database design for a CRM module. Ensure data quality and integrity through testing, validation, and monitoring.
- The search response time was reduced by 200% by rewriting the Joins, adding indexes, and using the FULL TEXT search concept, hence performance tuning is achieved.
- Monitored the performance of DB server. Perfmon tool used and new relic tool for analyzing the load on the server.
- Migrated over 2 years of order and customer-related data, leading to exposure to ETL tools, database backup, and restoration.
- Developed effective stored procedures for the dashboard screen that include reports and analysis of orders placed by users.
- After production release, worked as a production support engineer, where interaction with end clients, finding the issues in application by debugging logs, and performing quick fix is accomplished.
- Updated certificates of Dev, Test environments for the application and Configured Jenkins server. In addition, we conducted deployments to each environment.
- Worked on back-end tasks like updating service classes and writing queries for repositories.

**Innova Solutions | Software Engineer** - Hyderabad, India

Dec 2019 – Mar 2021

- Worked on migrating a retail project (Tech-style) from SQL server to Snowflake. Configured and optimized ETL Data Pipelines. Utilized AWS Glue transformations while Migrating Data.
- Built optimized queries that generated reports to clients on need basis.
- Got trained in various domains including .NET, web design, and SQL training. Developed a sample login web page, which stores logins and uses API's to fetch the data that store in their login.

## Projects

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**Big Data**

src code Dec 2024 - Mar 2025

- Created Map Reduce Jobs in Scala, HiveQL with best practices resulting optimization. Developed Scala codes using Broadcast, partition by, and bucket by in various file formats using both low-level code-RDDs and Structured APIs - Dataframes and Datasets.
- Implementing for streaming Data using Kinesis and AWS MSK. Provisioned clusters in AWS EMR and made Pyspark deployments using step functions.
- On-going certification on AWS Data Engineering which also covers Amazon S3, Redshift, Athena, Lambda services.

Provisioning clusters in Redshift and maintaining IAM roles.

Machine Learning Projects

src code Aug 2024 - Dec 2024

- Constructed an ML project for resume processing, including data collection, pre-processing, keyword analysis, and NLP tasks. Scope is to use cosine similarity. I also used Pandas to transform and work on DFs.
- Revamp a CNN and Deep Learning for Chess game. Some basic projects such as face recognition and object detection have also been developed using AI concepts. Also deployed these using Heroku.
- Good analytical and statistical knowledge on mathematical concepts for Machine Learning.

Education

Lambton College, Postgraduate Diploma in Artificial Intelligence and Machine Learning May 2023 - Jan 2025

- CGPA: 3.4/4.00
- Relevant Coursework: Python Programming, Advanced Python AI and ML Tools, Big Data Fundamental Storage, Visualization for AI and ML, Data Science and Machine Learning, Natural Language Processing, Data Mining and Analysis, Neural Networks and Deep learning.

K L University, Bachelor of Technology in Electronics and Communication Engineering Jun 2016 - May 2020

- CGPA: 9.2/10.0

Certifications

AWS Certified: Cloud Practitioner Mar 2025

Trendytech Certified: Big Data Dec 2024

AWS Data Engineering July 2025 (On going)