Ayan Guin

✉ **Email address:** ayanguin9@gmail.com 🏠 **Phone:** (+49) 15213510142

LinkedIn: https://www.linkedin.com/in/ayan-guin-344820177/ **GitHub:**
https://github.com/ayanguin

Date of birth: 23/06/1997 **Nationality:** Indian

ABOUT MYSELF

Highly motivated and results-oriented Data Science professional with 3+ years of experience in IT operations and a strong foundation in database management, Unix scripting, windows server management, azure pipeline, software development and testing. Currently pursuing a Master's in NLP with a strong background in statistical analysis, data visualization, data-driven decision-making, LLM, Gen AI, etc. Proficient in using tools like Python, R, SQL, and data visualization software to extract actionable insights from complex datasets. Experienced in creating and maintaining data pipelines and dashboards that have improved operational efficiency and decision-making processes. Proven ability to communicate complex findings in a clear and accessible manner to both technical and non-technical stakeholders. Passionate about leveraging data to drive business growth and support strategic initiatives.

EDUCATION & TRAINING

[01/07/2016 - 30/05/2020]

Bachelor of Technology

University of Engineering and Management Kolkata

City: Kolkata | **Country:** India | **Field(s) of study:** Computer Science and Engineering | **Final grade:** 8.16

[01/04/2024 - Current]

Master of Science

Universität Trier

City: Trier | **Country:** Germany | **Field(s) of study:** NLP

WORK EXPERIENCE

Tata Consultancy Service

City: Kolkata | **Country:** India

[18/03/2021 - 20/02/2024]

System Engineer

As part of this role, I worked in a team of 9 members, where I explored multiple aspects of the environment, databases and automation. With this role, I was able to have extensive working experience being part of the team taking project transition.

Below are some of the tasks:

Database Expertise:

- **Oracle Database Administration:** Managed and maintained Oracle databases, including installation, configuration, patching, and performance tuning.
- **SQL Tuning and Optimisation:** Implemented SQL tuning techniques to improve query performance by up to 30%, analysed execution plans, and optimised database indexes. Reduced query execution time by 20% through index optimisation.
- **Database Design and Modelling:** Designed and implemented new database schemas, including normalisation, indexing, etc.
- **Data Migration and Integration:** Successfully migrated and integrated data (1 TB+) between different databases, ensuring data integrity and consistency using

ETL processes.

- **Development:** Developed complex PL/SQL procedures, functions, and packages to automate tasks (e.g., report generation), implement business logic, and enhance database performance. Automated monthly report generation using SQL and Excel (e.g pivot tables, VLOOKUP, complex formulas, etc), reducing manual effort by 50+ hours.
- **Database Backup and Recovery:** Monitored robust backup and recovery strategies, including RMAN, for databases with up to 2TB of data to ensure data protection and disaster recovery, achieving a 99.99% recovery success rate.
- **Batch Control and Maintenance:** Investigated and fixed 10+ failed batches per month related to database updates or manipulation to ensure the databases' up-and-running state, especially during business hours, minimising downtime to less than 1 hour per incident.

Automation and Scripting:

- **PowerShell Automation:** Developed and maintained 20+ PowerShell scripts to automate routine database tasks, such as backups, restores, data loading (bulk insert), and monitoring, reducing task execution time by 40%.
- **Shell Scripting:** Utilised Shell scripting (Bash) to automate tasks on Unix-based systems (Linux), including database administration, file transfers (SFTP), and system monitoring, improving system uptime by 15%.
- **Azure DevOps:** Configured and maintained CI/CD pipelines in Azure DevOps to automate database deployments and testing processes, resulting in a 25% reduction in deployment time.

Problem-Solving and Analytical Skills:

- **Root Cause Analysis:** Identified and resolved 15+ complex database performance issues (e.g., high CPU utilisation, slow query response, corrupted code execution, deployment problems) through in-depth analysis and troubleshooting, reducing system downtime by 40%.
- **Data Analysis:** Analysed database usage patterns and performance metrics (e.g., query response time, disk I/O) to identify optimisation opportunities, leading to a 10% improvement in overall database performance. Performed self-automated housekeeping tasks (e.g., index rebuilding, data archiving) to reduce database load by 20%.
- **Problem-Solving:** Successfully resolved 20+ database-related issues, including data corruption, performance bottlenecks, and security breaches, ensuring data availability and integrity.

Soft Skills:

- **Teamwork and Collaboration:** Collaborated effectively with cross-functional teams of database administrators, developers, and other team members to achieve project goals, utilising Agile methodologies.
- **Communication Skills:** Communicated technical concepts clearly and concisely to both technical and non-technical audiences, including presentations to stakeholders and creating detailed documentation.
- **Continuous Learning:** Stayed up-to-date with the latest database technologies and trends through self-learning and professional development.

These are some of the highlights of my tasks performed at this organisation.

PROJECTS

[01/12/2019 - 01/03/2020] **Future value prediction of stock market price using LSTM**

Implementing the LSTM algorithm using python to predict
the stock market price. Used matplotlib to visualize the prediction.

[01/12/2020 - 31/01/2021] **Performing Analysis of Meteorological Data**

Analyze the data from the Weather data set of Finland, a country in Northern Europe. The dataset has hourly temperature recorded for the last 10 years starting from 2006–04–01 00:00:00.000 +0200 to 2016–09–09 23:00:00.000 +0200. I have collected the data set from Kaggle and wrote a blog post about the project in the medium.

[01/02/2021 - 01/03/2021] **Recognizing Handwritten Digits with Scikit-learn**

Python based project to analyze handwritten data and predict the digits using SVM classifier. Wrote a blog post about the project in medium.

LANGUAGE SKILLS

Mother tongue(s): Bengali

Other language(s):

English

LISTENING: C1 **READING:** C1 **WRITING:** C1

SPOKEN PRODUCTION: C1 **SPOKEN INTERACTION:** C1

Hindi

LISTENING: C2 **READING:** B2 **WRITING:** B2

SPOKEN PRODUCTION: C2 **SPOKEN INTERACTION:** C2

German

LISTENING: A1 **READING:** A1 **WRITING:** A1

SPOKEN PRODUCTION: A1 **SPOKEN INTERACTION:** A1

TECHNICAL SKILLS

Experties

PLSQL, T-SQL, Batch, Unix Shell Script, Python (Pandas, Numpy, Polars, Matplotlib, Seaborn, PyTorch), R, Java, Powershell Script, Windows Server, MS Excel, Word, Oracle SQL database, Microsoft SQL database, Active Directory, Data Visualization (Tableau, PowerBI), Machine Learning, Azure pipelines, Data Science, Data Engineering, Data Analytics, Gen AI, LLM.

I declare that the information provided in this CV is true and accurate to the best of my knowledge and belief.

Germany