# Poornima Mendhekar

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# Skills

Programming Languages: C, C++, Python, Java

**Web Development**: HTML, CSS, JavaScript, Node.js, React.js **Database Management**: Oracle, MySQL, MongoDB

**Operating Systems:** Linux

Data Analytics & Visualization: Excel, Power BI, Streamlit

Development Methodologies: Agile

UI/UX Design: User-centric designs, enhancing user experiences

# **Internships**

## Data Visualization (Internship-Infosys Springboard)

Remote Dec 2024 - Jan 2025

- Preprocessed AQI data using Pandas, improving accuracy by 30%.
- Designed a Power BI dashboard, enhancing insights by 40%.
- Deployed Streamlit application for real-time air quality index (AQI) monitoring, enabling instant data visualization and accessibility for 50% more users, and reducing report generation time by 2 hours weekly. Applied predictive modeling, increasing forecasting accuracy by 35%.
- Upgraded data structuring, improving query performance by 45%. Conducted testing, reducing errors by 25%.

## Education

# **Bachelors of Technology**

Symbiosis Institute of Technology Nagpur, MH, IN 2022 - 2026

Major in Computer Science And Engineering (C.G.P.A 8.15)

#### **Projects**

## ENHANCING LEGAL RESEARCH NETWORK AND TEXT ANALYSIS USING CORPUS LAW

(Feb 2025 -Present)

- Built a Neo4j-based legal research system for structured data analysis and retrieval.
- Integrated NLP and predictive analytics to enhance case-lawyer matching and recommendations.
- Integrated a lawyer ranking model based on performance metrics, specialization, and success rates.
- Created a graph-based legal network for efficient case-law lookup and legal trend analysis.

#### **CLEARVIEW: INTERACTIVE AIR QUALITY INSIGHTS**

(Dec 2024 - Jan 2025)

- Preprocessed AQI data using Pandas, handling anomalies and missing values. Crafted an interactive Power BI dashboard for AQI trends and geospatial
  analysis. Combined Power BI with Streamlit to provide real-time monitoring and user interaction.
- Configured predictive modeling with Scikit-learn to analyze pollutant impact. Structured data using a star schema, optimizing time-series and regional analysis. Ensured data accuracy and reliability through rigorous testing and validation.

## REAL-TIME LANGUAGE TRANSLATION USING IOT TECHNOLOGY

(Aug 2024 – Dec 2024)

- Developed an IoT-based speech translator using Raspberry Pi and Python, achieving 80-90% accuracy.
- Applied NLP and noise cancellation, ensuring fast and clear translation.
- Customized ML models with Scikit-learn, improving accuracy by 15%. Configured interactive dashboards in Power BI for real-time insights.
- Deployed scalable AWS solutions, reducing downtime by 30%. Built a translator supporting 35+ languages using Google Translate API.

# **IOT-BASED SMART DUSTBIN**

(Mar 2024 – Apr 2024)

Constructed an IoT-based smart dustbin management system using Tinkercad and Arduino IDE, integrating motion and contact sensors with a camera, improving threat detection and customer satisfaction by 20%.

# **Publication**

# Research paper on A Geospatial Perspective on Solid Waste Management

Presented at the International Conference on Advanced Communication, Energy, and Big Data (ICACEBD-24, Scopus-indexed). The project identified optimal locations for waste depots, improving waste management efficiency by 20%.

# Research paper on Real-Time Language Translation Using lot Technology

Presented at the 3rd International Conference on Automation And Computation AUTOCOM 2025. The project achieved a real-time speech-to-speech IoT-based translator implemented with Raspberry Pi and Python with 86% accuracy in 30 languages. Incorporated speech recognition, translation, and speech-to-speech with noise cancellation, providing quick, clear, and low-latency communication for a wide range of applications.

# Certification

- Infosys springboard of Data Visualization
- Red Hat System Administration I (RH124), Getting Started with SPSS
- Oracle Academy Java Fundamentals
- Power BI Certifications: Data Analytics using Power BI, Introduction to Business Intelligence, High Impact Presentations, Software Engineering and Agile Development
- Google Cloud Computing Foundations Certificate
- AWS Training and Certification: Serverless Analytics, Amazon Athena, AWS Glue, Amazon EMR, Amazon Redshift, Amazon OpenSearch
- Oracle Academy Database Foundations
- ServiceNow System Administrator Certification

# **Extra Curricular**

- · First Place in a college tech-based scavenger hunt, showcasing advanced decision-making and technical skills.
- Smart India Hackathon (Smart Education): Contributed to developing innovative solutions to enhance learning experiences, leading to an 18% increase in group member grades.
- **Content Writer & Social Media Manager:** Produced over 10 impactful articles, boosting NGO website traffic by 35% and enhancing social media engagement by 40%.
- Achieved top 15 ranking in a 24-hour hackathon, showcasing innovative Solution-finding, collaboration, and stress thinking.