

# Rohith Yalamanchili

✉ rohithyrc@gmail.com ☎ 330-396-1425 📍 Kent, Ohio 🔗 [linkedin.com/in/rohith-yalamanchili-a92b209b](https://www.linkedin.com/in/rohith-yalamanchili-a92b209b)

## OBJECTIVE

Motivated and results-driven Computer Science graduate student with hands-on experience as a Data Science Intern on a government project at Indo Euro Sync Pvt. Ltd. Possess 3+ years of expertise in machine learning, predictive modeling, and AI-driven solutions. Skilled in Python, R, and SQL, with a passion for learning and implementing cutting-edge technologies in web development and data science. Seeking to contribute to Centene's mission of improving health outcomes by designing and deploying impactful AI/ML solutions.

## EDUCATION

**Master of Science in Computer Science | GPA 3.88**

*Kent State University*

May 2025 | USA

**Bachelor of Technology in Computer Science Engineering | GPA 3.4**

*Vellore Institute of Technology*

May 2023 | India

## SKILLS

### Languages

Python, R, SQL, Bash, Git, JavaScript, HTML/CSS

### Databases & Cloud

MySQL, PostgreSQL, MongoDB, Google Cloud Platform (GCP), AWS S3, Firebase

### Libraries & Frameworks

Scikit-learn, Pandas, NumPy, TensorFlow, Keras, Matplotlib, Plotly, seaborn, PySpark, Flask

### Tools

Tableau, Power BI, Jupyter, VS Code, Docker, Excel (Advanced), GitHub

## PROFESSIONAL EXPERIENCE

### Machine Learning Intern

*Corizo*

Jan 2023 – Jun 2023 | India

- Designed and implemented classification and regression models for real-world business problems.
- Applied NLP techniques for sentiment analysis using spaCy, NLTK, and custom-trained models.
- Built ETL pipelines using Python, Pandas, and SQL for structured and semi-structured data.

### Data Science Intern

*Indo Euro Sync. Pvt. Ltd.*

Mar 2022 – Aug 2022 | Amaravati, India

- Developed and deployed machine learning models for predictive analysis in public policy planning.
- Built interactive dashboards for visualizing health and demographic data using Python (Plotly, Dash) and SQL.
- Collaborated with cross-functional teams to translate stakeholder requirements into technical deliverables.
- Improved model accuracy by 18% through hyperparameter tuning and feature engineering.

## PROJECTS

### End-to-End Health Analytics Dashboard

**Tools:** Python, Pandas, Plotly, seaborn, SQL, Power BI, Excel

- Developed an interactive dashboard for visualizing health trends and patient statistics from government healthcare datasets.
- Used SQL for querying structured data and Pandas for preprocessing over 100,000 records.
- Designed advanced visualizations in Power BI and Plotly to track disease trends and outcomes across demographics.

### Prediction of Insurance amount based on the medical condition of the patient.

- Applied regression analysis to predict health insurance costs based on factors such as age, BMI, and smoking status.
- Built and tested multiple regression models to identify the most accurate method for estimating premium costs.
- Demonstrated expertise in statistical modeling, machine learning, and Python for solving real-world health insurance challenges.

### COVID-19 Patient Admittance System Using Floyd-Warshall Algorithm

- Developed a system using the Floyd-Warshall algorithm to display the nearest available doctor or hospital for COVID-19 testing.
- Reduced waiting times by showing real-time hospital availability for testing and patient admittance.
- Enhanced healthcare efficiency during the pandemic by ensuring quick access to medical facilities and preventing overcrowding.

### Driver Drowsiness Detection

- Developed a real-time driver drowsiness detection system using YOLO, deep learning, and image processing techniques to enhance road safety.
- Implemented facial feature analysis to detect fatigue and alert drivers, reducing the risk of accidents.
- Evaluated system performance using key metrics such as false positive rates, latency, precision, and usability.