## PRANEETH BOINPALLY

Boinpallypraneeth.github.io |+1 571-595-8499 | Boinpally.praneeth@gmail.com | LinkedIn

#### PROFESSIONAL SUMMARY

Proficient in data science, data engineering, and data analysis, this dynamic professional is
results driven. A history of success in extracting and transforming complicated datasets,
creating predictive models, and providing insightful information. knowledgeable about
improving data accuracy and operational efficiency via the use of cutting-edge analytical
tools and programming languages. devoted to using technology to enhance decisionmaking and propel corporate development.

### **EDUCATION**

George Mason University | Virginia | USA Fairfax, VA, USA Master of Science in Computer Science January 2023 – May 2024 GPA 3.68/4

Sphoorthy Engineering College | Hyderabad, India Hyderabad, TS, India Bachelor of Technology in Computer Science and Engineering August 2018 – July 2022 GPA 7.4/10

### **WORK EXPERIENCE**

## **Data Analyst Intern**

Hyderabad, TS, India

TryCryFly Service Limited

Oct 2021 - Aug 2022

- Performed in-depth analysis and interpretation of intricate data sets to deliver practical company strategy insights.
- Worked in conjunction with cross-functional teams to improve the quality of data and streamline data collecting procedures.
- Data extraction, processing, and analysis were done using SQL and Python, which improved data accuracy by 95%.
- Using Power BI along with additional tools, I created detailed reports and visualizations that effectively communicated findings to stakeholders.
- Helped create data-driven solutions that raised customer happiness and operational effectiveness.

#### **PROJECTS**

## **Network Intrusion Detection Using Machine Learning Techniques**

# Technologies: XGBoost, scikit-learn

- Created a reliable system that uses cutting-edge machine learning techniques to detect and evaluate network breaches.
- Feature engineering and selection were done as part of the NSL-KDD dataset preprocessing to maximize model performance.
- Using XGBoost, predictive models were developed and trained, yielding a high accuracy rate of 98% in identifying network intrusions.
- Scikit-learn was used to evaluate and fine-tune the model, guaranteeing the detection system's dependability and efficacy.
- enhanced the network's overall security by implementing real-time monitoring and detection capabilities using the trained model.
- Provided stakeholders with comprehensive results and visual aids, providing practical advice for enhancing network security procedures.

### **Data Tool Kit**

## Technologies: Python, Flask, React, Chart.js, Pandas, Axios, GitHub, Docker

- Designed an application for the web that facilitates effective data analysis by cleaning and visualizing data.
- Using Pandas to deliver processed results, a Flask backend was implemented to manage file uploads and clean data.
- Built a React frontend with Chart.js-powered interactive visualizations, file upload functionality, and data cleaning features.
- Took away duplicates and handled missing values, allowing users to select which data cleaning processes to do.
- Adopting Axios to provide smooth front-end and back-end interactions.
- The utilization of dynamic charts and graphs has improved the user experience by enabling users to view cleansed data in several ways.

# **Intelligent Proctor**

# Technologies: Keras, TensorFlow, Google Cloud Platform (GCP), MongoDB

- Constructed a system that uses data analysis of video streams to track online exams.
- Gathered and analyzed video information to find questionable activity during tests.
- Used deep learning methods to improve the precision of detection.
- Developed reports and dashboards to display exam integrity measures.
- 15% fewer false positives were produced because of data-driven modifications and model enhancements.

## **Driver Drowsiness Detection Using Machine Learning**

Technologies: Python, OpenCV, TensorFlow, Keras

- Built a reliable method that makes use of cutting-edge machine learning techniques to detect and evaluate network breaches.
- Utilizing feature engineering and selection to maximize model performance, the NSL-KDD dataset was preprocessed.
- To detect network intrusions, predictive models were built and trained using XGBoost, yielding a high accuracy rate of 98%.
- The detection system's dependability and efficacy were ensured by using scikit-learn for model assessment and fine-tuning.
- utilized the learned model to provide real-time monitoring and detection capabilities, hence improving network security overall.

### Claim Safe | Auto Insurance Premium Recommendation System

Technologies: Python, Machine Learning, Data Visualization, Apache Kafka, PostgreSQL

- Developed a system that uses in-depth data analysis to suggest vehicle insurance rates.
- Merged and examined information from several sources, such as car and driver histories.
- Developed prediction models to determine risk and suggest premium amounts for insurance.
- Using interactive dashboards, risk assessments and premium suggestions were visualized.
- Improved decision-making by offering transparent, data-driven insights into the calculation of premiums.

#### **Technical Skills**

**Languages**: Java, Python, Python Scripts, C, SQL, CSS, JavaScript, HTML, C++, R, Scala **Tools and Libraries**: Pandas, NumPy, scikit-learn, XGBoost, TensorFlow, PyTorch, Tableau, Power BI, Microsoft Excel, Seaborn, Jupyter Notebook, Matplotlib, Apache Spark, Elasticsearch

**Techniques**: Data Analysis, Data Cleaning, Data Visualization, Statistical Analysis, Machine Learning, Predictive Modeling, Data Mining, ETL Processes, DBMS, Data Warehousing, A/B Testing, Hypothesis Testing, Regression Analysis, Time Series Analysis **Other Skills**: Project Management, Problem-Solving, Critical Thinking, Communication Skills, Collaboration, Attention to Detail

Cloud: AWS (AWS S3, AWS Redshift, AWS RDS, AWS Glue, AWS Lambda, AWS SageMaker), Microsoft Azure (Azure Blob Storage, Azure SQL Database, Azure Data Factory, Azure Synapse Analytics, Azure Machine Learning), Google Cloud Platform (GCP)

**DevOps and Containers**: Docker, Kubernetes, Jenkins

Database Technologies: PostgreSQL, MongoDB, Firebase, MySQL

Data Streaming and Processing: Apache Kafka, Apache Spark

### **Certificates**

## Java Programming

- **Institution**: Great Learning
- **Description**: Accomplished a comprehensive course on Java programming that covered data structures, algorithms, object-oriented programming, and practical applications.

## **IPL Auction Bidding using Data Science**

- **Institution**: Great Learning
- **Description**: Developed a data science project that included data gathering, preprocessing, model creation, and prediction analysis, with an emphasis on IPL auction bidding.

### **Java Basic**

- Institution: HackerRank
- **Description**: Mastered fundamental Java programming concepts with the help of Hacker Rank's online tests and challenges.

## **AWS Academy Cloud Foundations Badge**

- **Institution**: AWS Academy
- **Description**: Obtained the AWS Academy Cloud Foundations Badge by proving that they have a solid understanding of the principles, services, architecture, cost, security, and support of cloud computing.

# MySQL Skill Badge

- **Institution**: LinkedIn
- **Description**: Completed LinkedIn's assessment, which covered fundamental MySQL database management and query optimization abilities, to obtain the MySQL skill badge.

# **Python Basic**

- **Institution**: HackerRank
- **Description**: Proved proficiency in fundamental Python programming by finishing the tasks and challenges on Hacker Rank.

### **Awards and Achievements**

# **Best Project Award**

• Awarded for the CSE group's outstanding project, the Driver Drowsiness Detection system, in the spring semester of the 2021–2022 academic year.

#### **Hackathon Achievement**

• Placed fifth out of more than 100 teams in a St. Peter's Institute hackathon. created an artificial intelligence (AI) proctoring system to oversee online tests and stop cheating. granted a technical internship as an added bonus.