**AJAY REDDY REGATTE**

**Senior Data Scientist / Machine Learning Engineer**

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**SUMMARY**

* 9+ years of extensive experience as a Data Scientist and Machine Learning Engineer with a proven track record of leveraging advanced analytical techniques to drive business solutions.
* Adept at collaborating with cross-functional teams to extract actionable insights from complex datasets.
* Demonstrated expertise in statistical modeling, machine learning algorithms, and data-driven decision-making.
* Skilled in programming languages such as Python, R, and SQL, with expertise in machine learning libraries, data analysis, and visualization.
* Proven ability to work with big data technologies, database management, statistical analysis, and deep learning techniques.
* Involved in all phases of software development life cycle (SDLC) in Agile, Scrum and Waterfall management processes.
* Proficient in cloud platforms, version control, and collaboration tools for effective project management.
* Proven ability to transform raw data into meaningful narratives, driving strategic business outcomes.

**TECHNICAL SKILLS**

* **Programming Languages:** Python, R, SQL
* **Machine Learning Libraries:** TensorFlow, PyTorch, Scikit-Learn
* **Data Analysis & Visualization:** Pandas, NumPy, Matplotlib, Seaborn
* **Big Data Technologies:** Hadoop, Spark
* **Database Management:** MySQL, MongoDB
* **Statistical Analysis:** Regression Analysis, Hypothesis Testing
* **Deep Learning:** Neural Networks, CNNs, RNNs
* **Natural Language Processing (NLP):** NLTK, SpaCy
* **Feature Engineering:** PCA, LDA
* **Model Evaluation:** Cross-Validation, ROC-AUC, Precision-Recall
* **Version Control:** Git, GitHub
* **Cloud Platforms:** AWS, Azure
* **Collaboration Tools:** Jira, Confluence
* **Programming Frameworks:** Django, Flask
* **Containerization:** Docker
* **Continuous Integration/Continuous Deployment (CI/CD):** Jenkins

**PROFESSIONAL EXPERIENCE**

**Client: Paycor Cincinnati, OH Sep 2020 to present**

**Sr. Data Scientist / ML Engineer**

**Responsibilities:**

* Spearheaded the development of advanced machine learning models to optimize client payroll processes.
* Worked in Agile development environments, participating in Scrum meetings and adapting to changing requirements.
* Implemented predictive analytics algorithms utilizing TensorFlow and PyTorch, significantly improving accuracy in forecasting client workforce trends.
* Led a cross-functional team in the integration of machine learning solutions into Paycor's existing systems, ensuring seamless adoption and enhanced functionality.
* Conducted comprehensive data analysis and visualization using Pandas, NumPy, Matplotlib, and Seaborn to extract actionable insights.
* Conducted extensive data analysis using Pandas and NumPy, identifying key patterns and trends for actionable insights.
* Implemented deep learning techniques, including Neural Networks, CNNs, and RNNs, for complex problem-solving.
* Applied NLP using NLTK and SpaCy for text analysis and sentiment classification.
* Collaborated with the IT team to implement Hadoop and Spark for efficient processing of large-scale payroll datasets.
* Executed feature engineering techniques such as PCA and LDA to enhance model performance and interpretability.
* Utilized MySQL for database management, ensuring data integrity and accessibility for various stakeholders.
* Applied regression analysis and hypothesis testing to evaluate the effectiveness of newly implemented machine learning models.
* Developed web applications using Django and Flask to provide interactive interfaces for stakeholders.
* Developed and deployed containerized applications using Docker, streamlining deployment processes.
* Established version control practices using Git and GitHub, ensuring code integrity and collaboration efficiency.
* Utilized collaboration tools such as Jira and Confluence for efficient project management and communication.
* Engaged in continuous integration and deployment using Jenkins, automating testing and deployment pipelines.

**Client: Fiserv, Inc. Brookfield, Wisconsin Apr 2019 – Sep 2020**

**Data Scientist / ML Engineer**

**Responsibilities:**

* Developed and implemented predictive models using TensorFlow, PyTorch, and Scikit-Learn to enhance fraud detection algorithms.
* Conducted exploratory data analysis using Pandas, NumPy, Matplotlib, and Seaborn to identify patterns and trends in financial data.
* Collaborated with cross-functional teams to integrate machine learning solutions into existing software applications.
* Utilized AWS for cloud-based storage and computation, ensuring scalability and accessibility.
* Implemented big data technologies such as Hadoop and Spark to handle and process large volumes of financial transaction data.
* Conducted A/B testing to evaluate the performance of different machine learning algorithms.
* Implemented and maintained Django and Flask applications for web-based reporting and analytics.
* Worked on the development of recommendation systems for personalized financial products.
* Collaborated on data visualization projects to communicate complex findings to non-technical stakeholders.
* Implemented CI/CD pipelines using GitLab CI/CD to automate testing, building, and deploying data pipelines and applications.

**Client: KeyBank Cleveland, OH Feb 2017 – Apr 2019**

**Sr. Data Scientist**

**Responsibilities:**

* Implemented large-scale data and analytics using advanced statistical and machine learning models.
* Led the development of predictive models for credit risk assessment, resulting in a 25% reduction in loan default rates.
* Implemented recurrent neural networks (RNNs) for time-series forecasting, enhancing the accuracy of financial predictions.
* Conducted extensive data cleaning and preprocessing using Python and SQL.
* Collaborated with business analysts to understand key performance indicators and develop relevant data models.
* Employed statistical analysis techniques for customer segmentation and targeted marketing strategies.
* Conducted regular code reviews to ensure best practices and code quality within the team.
* Developed and maintained machine learning pipelines for automated model training and evaluation.
* Provided mentorship and guidance to junior data scientists, fostering a collaborative and innovative team environment.
* Utilized Azure for cloud-based solutions, ensuring data security and compliance.
* Implemented version control using Git for tracking changes and maintaining code integrity.
* Implemented CI/CD pipelines on GitLab for automated testing, building, and deploying data engineering code and pipelines.

**Client: Aflac, Columbus, GA June 2014 – Feb 2017**

**Data Scientist**

**Responsibilities:**

* Gathered business requirements with the business users, prioritized and translated the same into system/design requirements.
* Created project artifacts such as business requirements documents, business rules spreadsheets, use case documents, functional requirements specifications, data mapping documents, technical specifications, and detailed design documents.
* Developed and deployed machine learning models for claims prediction, reducing processing times by 30%.
* Utilized PyTorch for implementing neural networks in medical image analysis projects.
* Conducted exploratory data analysis and statistical modeling to identify patterns in healthcare data.
* Applied hypothesis testing to evaluate the effectiveness of new insurance products.
* Implemented MongoDB for efficient storage and retrieval of unstructured data.
* Managed databases, including MySQL and MongoDB, for seamless data storage and retrieval.
* Collaborated with cross-functional teams to integrate machine learning into customer-facing applications.
* Developed and maintained data dashboards for tracking key performance indicators.
* Utilized Spark for distributed data processing in big data analytics projects.
* Conducted regular reviews of emerging technologies to drive continuous improvement in data science methodologies.

**Education:**

**Cleveland State University (Masters’ Degree)**

**Masters of Science in Information Sciences.**

**Mahindra University (Bachelors’ Degree)**

**Computer Science and Engineering (B. Tech).**