

ABILASH RAMESH

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SENIOR SOFTWARE ENGINEER

Focused, detail-oriented Software Engineer with proven success and comprehensive knowledge responsible for designing, developing, and maintaining computer software using creativity and technical skills and applying software engineering principles to help solve new and ongoing problems for an organization. Analyze data to effectively coordinate the installation of new systems or modify existing systems. Collaborates with engineers, programmers, and others to design systems and gather information on project limitations, capabilities, performance requirements, and interfaces. Alters existing software to resolve mistakes and errors and improve its overall performance. Accomplishes measurable results utilizing strong interpersonal and organizational skills that provide solution-oriented outcomes in fast-paced, dynamic environments. Communicates concisely, leads by example, and exceeds expectations.

AREAS OF EXPERTISE

Leadership | Full-Stack | Root Cause Analysis | Defines Scope/Scale | Design Patterns | Scalable Web Services & Applications
Data Structures | System Analysis | Architecture | Cross-functional Collaboration | Micro-service Development | Troubleshooting

PROFESSIONAL OVERVIEW

COWBELL CYBER, INC. - Pleasanton, CA

May 2021 – October 2023

SENIOR SOFTWARE ENGINEER (*Promoted to this position in 05/2023*)

- Built connector framework to promote reliability and development speed, initiated containerization of lambda functions, and developed CI/CD deployment using GitHub Actions. Reduced connector development time by 50%.
- Built real-time and batch data processing using PySpark/Databricks to aid in risk assessment and insights.
- Optimized DAG (Apache Airflow) to increase the risk pool size by 60%, thus bringing ~90% of SMEs firmographic data.
- Trained and optimized models to identify risk business for cyber insurance.
- Built data imputation techniques to fill missing values, especially for revenue, technologies used, and # employees.
- Enhanced new Python Flaskapp microservices by implementing server-side sessions, providing better data metrics collection.

SOFTWARE ENGINEER (*Served in this position from 05/2021 to 05/2023*)

- Built Python Flaskapp/GraphQL-based microservice to provide business firmographic data and risk intelligence.
- Optimized accounts creation/updates process by decreasing SLA by 25% after analyzing points of failure and code workflow.
- Built data ingestion pipelines for fetching data from third-party services, proprietary scanners, and connectors.
- Developed ETL jobs for streaming and storing risk data, giving the company visibility on Small and Medium-sized companies' risk profiles and firmographics data.
- Maintained codebase and services related to Connectors on the Cowbell Cyber platform. (AWS Lambda, GraphQL, Apache Airflow, GitHub Actions).
- Participate in code review, provide code optimization input, and develop best practices.

EDUCATION/ CERTIFICATIONS

Master of Science | Data Science and Analytics | University of Oklahoma, Norman, OK (GPA 4.0) 01/2019 – 12/2020

Master of Science | Industrial and Systems Engineering | University of Oklahoma, Norman, OK (GPA 3.47) 08/2017 – 12/2019

KNOWLEDGE SKILLS AND ABILITIES

- Programming Languages:** R, PYTHON, SQL, Command Line tools, YAML, Docker
- Databases:** PostgreSQL, Snowflake, Azure SQL, Oracle DB, Mongo DB, SQLite
- Cloud Platform:** AWS (Sagemaker Lambda, Airflow, S3, ECR) Google (Vertex, BigQuery, Security)
- Data Tools:** Databricks, Data Build Tool (DBT)

PROJECTS

Comparison of performance of CNN with text augmentation:

- Implemented Convolution Neural Networks in PyTorch for text classification and obtained 85.75% test accuracy
- Performed text augmentation using Easy Data Augmentation (EDA) to increase available data points for classification
- Obtained 87.22% test accuracy with faster convergence when compared to the model constructed with the original dataset

Document Summarizer:

- Selected a user-specified percentage of documents among 28000 documents and performed text normalization
- Vectorized document contents using TFIDF Vectorizer and clustered document using K-means algorithm
- Gathered text data, implemented text summarization using TextRank, and appended the summary of each cluster to a text file.