RISHABH SHUKLA

SENIOR SOFTWARE ENGINEER

SUMMARY

1. Full Stack Engineer with overall 5.7 years of experience in frontend development, backend development , data base design, building classification and regression models to predict customer attrition and future best customer.
2. Responsible for UI development/Integration, ML API development, and R&D data science .
3. Hands on experience in building framework in Amazon web services, Azure Cloud.

SKILLS

Frontend – Angular(2/14),NGRX,HTML5, CSS3.Bootstrap,REST integration, JWT, report generation/ formatting, custom visualisation

Backend – Python,Flask /Fast Api, NodeJS, expressJS, database design, design patterns, micro service architecture ,web architecture, data storage and retrieval.

Programming Languages – Python, Javascript, typescript, ECMA script 2019/ 2021

Databases – MYSQL, MongoDB, MYSQL Server

Version control system – git, github, gitlab, bitbucket, SVN, JIRA

Cloud – Amazon web services (EC2,Lambda)
Azure Cloud (Basics)

WORK EXPERIENCE

Bizruntime IT Services Pvt Ltd

Software Developer(Mar 2017 – Jun 2019)

Grexter Housing Pvt Ltd

Software Developer(Aug 2019 – Nov 2019)

TCG Digital

SDE 3 (Manager) (April 2022 - Present)

Senior Software Engineer(Mar 2021 – APR 2022)

Consultant(Sep 2020 – March 2021)

Software Developer(Mar 2020 – Aug 2020)

CERTIFICATION

- Executive PG Diploma in Data Science (IIIT-B)
- The Complete 2021 Web Development Bootcamp
- AWS Technical Professional

PERSONAL INFORMATION

DOB 02/09/1995

Education BE (ECE)

Languages English, Hindi

PROJECTS

1. Plant Profitability Optimisation Framework

Technologies – Angular,Spring Boot Framework ,Python Fast API, MySQL, Data simulation, Azure.

- Saudi Oil & Gas Giant has hundreds of refineries and wanted to optimise plant profitability.
- Developed stepper based user interface of plant parameter using custom components with Authentication and Authorisation using JWT token
- Developed API to calculate net present value, Internal rate of return, Profitability index, and Cash Cost using Python and **Pro II optimiser** simulation results
- Developed API to Generate cashflow report and send as email attachment to user via client SMTP server.

2. Plant Report Management Tool

Technologies – Angular, HTML, CSS, Azure- ADL, AWS S3 bucket, JIRA, Azure.

- Developed UI for visualising different plant data, Generate PDF reports, Annotate report on the go and share with plant operators using different dashboards.
- Developed PDF annotation tool using JS & JQuery plugin and integrated to Angular as external script.
- Developed chart editor component which lets users to edit chart legends, icons, colours using json based structure from DB.

3. Polymer Plant Information System

Technologies – Angular, HTML, CSS, JS, Python, Scrapy, Pentaho, Spring boot Framework, bucket, JIRA, AWS.

- Developed custom components and libraries for Visualisation and dash boarding.
- Developed Data Visualisation tool which allows users to compare Tag sensor data using different kinds of visualisations for 1000-5000 concurrent users
- Developed web scrapping script to download data from an exchange for ETL jobs to update monthly raw material cost.

4. KYC VERIFICATION

Technologies – Angular, HTML, CSS, JS, Python, Image Classification, Text Extraction,Transfer Learning, bucket, JIRA, AWS.

- Flask API For KYC verification using transfer learning and Tesseract taking image as input and giving match percentage with user data available in DB.
- Trained a classification model to distinguish the image based on feature detection.

5. Visur.io

Technologies - HTML, CSS, Javascript,
Angular(2/7),SQL ,Dashboard, D3 JS, GIS Server,

- Visur is a real-time, cloud-based reporting application for oil & gas companies to better manage the well-site by capturing incidents data updates through the web, Android and desktop Application.
- Build Dashboards, Custom visualisation and components, SQL Query Optimisation

DATA SCIENCE CASE STUDIES

1. Credit Card Fraud Detection

- Objective: To predict fraudulent credit card transactions from imbalanced dataset.
- Solution: Constructed Logistic Regression, Random Forest, SVM and XGBoost models
- Key Achievement: Developed the final model using XGBoost with Precision/Recall of ~ 99%.

2. Gesture Recognition using 3D Convolution and RNNs

- Objective: Gesture Recognition using 3D Convolution and RNNs
- Solution: Constructed 3D CNN model and a 2D CNN + RNN model to do gesture recognition
- Key Achievement: Developed 2 models 3D CNN and 2D CNN + RNN model to achieve accuracy of 81% and 91% respectively.

3. MNIST Dataset recognition using Neural Nets

- Objective: Create a neural net and implement Data preparation, Feedforward, Loss Compuation, Backpropagation, parameters updates steps using numpy
- Solution: Constructed a Neural Network using Numpy to MNIST dataset digit classification
- Key Achievement: Achieved an accuracy of 87%.

4. Leads Scoring

- Objective: To increase the leads conversion rate from 30% to 80%
- Solution: Created a classification model using RFE and Logistic Regression
- Key Achievement: Indentified top factors affecting leads and Proposed a final Logistic regression model with precision of 77% percentage.

5. Telecom Churn

- Objective: To identify customers at high risk of churn and identify the main indicators of churn
- Solution: Constructed Logistic Regression, Random Forest, SVM and XGBoost models
- Key Achievement: Developed the final model using Random Forest with Sensitivity of 80%.

6. House Price Prediction

- Objective: To predict the prices of houses and also find the top 5 driver variables.
- Solution: Advanced Regression model(using Lasso and Ridge Regression) to predict the house price and also to find the top 5 driver variables for each model.
- Key Achievement: Created a predictive model using Ridge Regression with R2_score of 78% (approx) and Lasso Regression with R2_score of 76%(approx).

7. Stock Market Analysis

- Objective: To generate Buy and Sell signal for stocks based on Moving Averages
- Solution: C Calculated 20 Day and 50 Day Moving Averages to generate signal (Buy/Sell/Hold) for stocks
- Key Achievement: identified signal for the stocks using the Closing Price.

8. Car Price prediction

- Objective: To model the price of cars with the available independent variables and understand the topmost factors affecting the pricing of cars .
- Solution: Linear Regression model to predict the price of cars
- Key Achievement: Predicted the prices of cars with R2_score of 0.76 and also identified the factors affecting the prices

rishabhshukla3005@gmail.com 9686358106 Bangalore