

SATISH RELLA

PROFESSIONAL SUMMARY

I have knowledge and experience in the field of software engineering, machine learning, and data science. I am passionate about using my analytical, statistical, and programming skills to collect, analyze, and interpret large data sets, so that by using this information to develop data-driven solutions to complicated business challenges. Expert in python and competent in Java, C++, JavaScript, also worked with many machine learning frameworks such as TensorFlow, Keras, and Scikit-Learn.

EDUCATION

Master's, Computer Science *University of Texas At Arlington, GPA: 3.7/4.00*

PROGRAMMING LANGUAGES AND TECHNOLOGIES

Programming Languages: Python, Java, C++, .Net
Scripting Languages: HTML, CSS, JavaScript, PHP
Databases: SQL, MongoDB, Pig, Hive
Data Science Frameworks: TensorFlow, Keras, Scikit-Learn
Tools: Eclipse, Anaconda, Android Studio, PyCharm, Jupyter Notebook
Visualization Tools: Matplotlib, Tableau
Virtualization Tools: Docker
Cloud Platforms: AWS, IBM Cloud, Microsoft Azure
Big Data Tools and Technologies: Spark, Hadoop, Android

PROFESSIONAL EXPERIENCE

Position: -Software Engineer *Tata Consultancy Services (India)* **June 2017 – Dec 2018**

Project: AIG

Description: AIG is an American Based finance and insurance corporation. I worked in REM (Reinsurance Module) which is an internal, thin-client application shared by all DBG profit centers and their respective underwriting & booking systems. SRI (Strategic Reinsurance) is a web-based application which provides a centralized repository of reinsurance treaty information.

Roles and Responsibilities:

- We match the Treaty policies with the customer requirements and resolved the Service now tickets.
- Rescheduled and rewrite the Jobs in COBOL for effective health check of all applications and reporting the results.
- Used .XML Log files for checking Error exception handling.
- Enhanced the user interface of business application for the ease of use and resolved the support tickets.

Environment: Java, IBM data studio, Mainframes, SQL Management Server, Jira, Service now.

Position: - IoT Intern *Uptec Idealabs Private Limited (India)* **Dec 2015 – Jan 2016**

Project: Ambience Checkup Using Wireless Sensor Network

Description: Uptec Idealabs Limited is a Start-up based company and Public incorporated on Aug 2013. I worked on one of the Project and got hands on experience with IoT products.

Roles and Responsibilities:

- Designed and implemented a wireless sensor network that monitored the weather conditions.
- Collected the data from the node to Raspberry Pi using wireless systems.
- Pushed the collected data to an IoT analytics platform to visualize the data with every one-minute interval for updates of weather conditions from each node.

Environment: C, Raspberry Pi, Arduino, Cloud, Android SDK, ThingView-ThingSpeak

Position: Android Developer Intern *Tifac Core Private Limited (India)* **July 2014 – Sept 2014**

- Learned and developed numerous miniature android applications
- Understood the Android environment and developed small applications such as Gaming applications, Bluetooth, GPS location.

PROJECTS

Image Caption Generator Using CNN-LSTM (Academic Project)

Jan 2020 – May 2020

- Extracted the features of every photo from the convolution layers of VGG16 and RESNET50 models.
- Converted the text input to vector using the word embedding layer followed by LSTM.
- Predicted the caption of photo by merging the feature and word embedding vectors, processed by a dense layer.

Data Mining (Mini Projects)

Jan 2020 – Apr 2020

- Statistical Exploratory Data analysis, Aggregation & filter & Ranking, Visualization conducted guided exploration on Federal Emergencies and Disasters dataset to identify the different patterns in data for further analysis.
- Decision tree, Naive Bayes classification, and K-Nearest Neighbor implemented on the Cardio dataset to find the active patients.
- K-means clustering, Hierarchical Agglomerative clustering models applied on Adult Dataset to locate who earned more than \$50,000 or not, and to visualize clusters for predicted and actual cluster labels.
- Apriori algorithm with different support & confidence was applied on Shopping cart Dataset to find which items were sold.

Master's Project (Research Idea)-Public videos, is there privacy in numbers?

Jan 2019 – Apr 2019

- Collected the data with a specific date, time, location, length of video using API and extracted the faces in Keyframes of video.
- Developed a machine learning classifier to find the face in public videos of YouTube.

Client-Server System (Academic Project)

Jan 2019 – Apr 2019

- Designed a client-server program in DOCKER using Socket Programming in python.
- Communicated between client and server, broadcast the messages, and share files between each other.
- Implemented a distributed locking system between the multiple servers on shared files.

Database-(Mini Projects)

Jul 2019 – Aug 2019

- **Project -1:** - Implemented a two-phase locking (2PL) protocol for concurrency control. The protocol to be implemented will be rigorous 2PL, with the wound-wait method for dealing with deadlock
- **Project -2:** -In this project, we used Mango DB as an example of a document-oriented NOSQL system, and see how data is stored and queried in such a system

Portfolio-Website (Academic Project)

Aug 2019 – Nov 2019

- Designed a dynamic individual Portfolio-Website using HTML, CSS as Frontend.
- Implemented MYSQL as backend and Managed data through PHP.
- Migrated the whole project through MVC Framework (Laravel), later it deployed in the cloud.

Forecasting NIKE Revenue Data (Academic Project)

Aug 2019 – Nov 2019

- Forecasted the Revenue of Nike Revenue data using Linear Regression, K-Nearest Neighbors, Pyramid-Arima, and FBProphet.
- K Fold cross Validation on the each of the model using training data for comparison of performance of models (with 5 Folds).

Collaborative Topic Modeling to Recommend Scientific Articles (Academic Project)

Jan 2017 – May 2017

- Dealt with providing database using Hadoop tool and analyzed the limitation of data.
- Added the number of machines to the cluster and obtained the results in less time and high throughput
- Minimized the maintenance cost and used joins, partitions, and bucketing techniques in Hadoop.

Automated Toll Gate Plaza (Academic Project)

Jun 2017 – Nov 2017

- Developed the web application by defining the automatic deduction of money from user account at the toll gates.
- To compare the Vehicle number in database, we extracted text from the image using MATLAB.
- Ensured for no waiting time near toll gates that aided in decreasing the traffic condition.

CERTIFICATIONS

- Udemy – Python for Data Science
- LinkedIn – Advanced SQL for Data Scientists
- LinkedIn – Tableau Essential Training (2020.1)

ACTIVITIES AND ACHIEVEMENTS

- Attended workshop on Basic hacking tips like email phishing, password penetrating in 2016. Attended the seminar on entrepreneurship conducted by TOASTMASTERS club in VIT in 2014.
- Served as the coordinator of Rivera – the technical fest at VIT, Vellore, 2014.
- Organized the gaming stall in Rivera, 2013.
- Participated as a member in National Services camp at Timiri blocks in vellore districts, Tamil Nadu, 2014.
- Carried out social services at old age home and orphanage at Nirmal Hriday old age home and Karunalaya children's home in Vellore, 2014.
- Worked as the volunteer in Rivera (Cultural Fest), 2012.
- Took part in Olympiad and Unified Council Examinations at Andhra Pradesh during 2007-2008