

# Ruchil Barya

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[www.linkedin.com/in/ruchil-barya-1770867b](https://www.linkedin.com/in/ruchil-barya-1770867b)

- Over 5 years of experience in IT industry as Business Intelligence Consultant, worked on GRC (Security) and SAP HANA directly with client as SAP (Germany)

## EDUCATION AND HONORS

### Harrisburg University Institute of Science and Technology

Masters in Analytics

- Cumulative GPA: 4.0/4.0
- Relevant Coursework: Machine Learning, Natural Language Processing, Time Series Analysis, Data visualization, Big Data Analytics, Optimization, Deep Learning

Harrisburg, PA

Jan 2020-Aug 2021

### Barkatullah University of Technology

Distinction Bachelor of Engineering among Top 3

- Central Scholarship, Medhavi chatra Yojna (Awarded with 50% of college fee each year)

Bhopal, India

Aug 2009-Jun 2013

## SKILLS

- **Programming Languages:** R, Python (eg. scikit-learn, numpy, pandas, matplotlib, Keras, Tensorflow), SQL
- **Data Science:** Machine Learning (Regression, Clustering, Classification), Natural Language Processing, Time Series Analysis, Predictive Modelling, Deep Learning, Probability, Recommendation Systems, Experimental design, Hypothesis testing, Git
- **Big Data Analytics:** Hadoop, Apache Hive, Apache Pig, PySpark
- **NoSQL:** MongoDB
- **Tools:** Power BI, AWS, Tableau
- **Certifications :** Machine Learning on AWS, Deep Learning Specialization

## PROJECTS AND LEADERSHIP

### Analyzing the effect of Social Media on Cryptocurrency Prices (Research Thesis)

Feb 2021- Present

- YouTube videos transcript along with Twitter tweets will be analyzed by Deep Learning Advanced Techniques (LSTM -RNN)

### Predicted the number of COVID-19 cases and deaths in India and USA

May 2020-Aug 2020

### And found the relationship between COVID-19 cases and deaths

- Time series analysis was used to predict the number of cases and deaths of COVID-19 -19
- Quadratic equation of time was used in linear regression, VAR, gradient descent was used to predict deaths
- SARIMA model was applied to reduce noise

### Understanding how mental illness has been talked about over the years based on the NYTimes articles

Sep 2020-Dec 2020

- Analyzed over 12,000 articles mentioning mental illness
- Applied sentiment analysis to understand the tone of articles
- Factor analysis was used to understand the major topics discussed over the years

### Recommendation system based on the movie titles and viewer's rating

Jan 2021-Feb 2021

- The model captured similarities between videos based on both title text and review histories in AWS Sagemaker
- Trained on a GPU instance while orchestrating from a small CPU instance
- Created a live CPU endpoint to generate prediction in real-time

### Absenteeism amongst employees in a courier company

Sep 2020-Dec 2020

- Collaborated with 3 other colleagues to complete this project
- Applied different machine learning techniques to get the best results

### Facial expression detection

Feb 2021-Mar 2021

- Applied CNN with Keras and Tensorflow to classify a happy face

### Analyzed a use case architecture for a NoSQL database

Jan 2021-Mar 2021

- Presented a data architecture paper of Shutterfly when they migrated from Oracle to MongoDB

### Analysis of Death and follow-up time period due to heart failure

May 2020-Aug 2020

- Prediction of the death event based on the follow-up time period when the patient has already suffered a heart attack

### Screen Time on phone Analysis

May 2020-Aug 2020

- Usage of dashboarding techniques in R to visualize the screen time pattern

## **PROFESSIONAL EXPERIENCE**

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### **Ascii labs**

*Data Science & Machine Learning Intern*

**Baltimore, MD**

Jan 2021- May2021

- Presented a proposal for the NARA search engine recommendation system based on collaborative filtering
- Designed experiments, tested hypotheses, and built predictive Models.
- Performed Forecasting, Clustering, Multivariate linear & logistic regression
- Presented the importance of MLOPs in Data Science Lifecycle to end clients
- Worked with partners to translate business challenges into Data Science problems
- Analysis and visualization of various statistical data related to Clients
- Enhanced development of Statistical & Data Visualization techniques to discover insights, patterns, and trends that turn data into insights
- Developed and tuned SQL queries to automate and improve data extraction from large data sets which enhanced the efficiency of the process.

### **Capgemini**

*Business Intelligence Consultant*

**Bangalore, KA**

Jun 2018 -May 2019

- Administered and supported over 20,000 SAP accounts for more than 20 systems as subject matter expert for Governance Risk Controller and technical troubleshooting for complex authorization issues
- Presented a POC for the migration of old profiles to the Business role concept which received appreciation from the client
- Created organized, customized analysis and visualized projects and dashboards to present to Senior Level Executives.
- Identifying trends in support incidents/task for automation, thus reducing the incident count to 100-200
- Implemented Governance, Risks and Security to minimize security lapses and process handing
- Carried out independent research and innovation and technological domains while supporting existing projects
- Worked with strategic and analytics to improve yearly trends to increase client relationships, improve the customer base.

### **Tata Consultancy Services**

*Analytical Consultant*

**Bangalore, KA**

Mar 2014 -May 2018

- Primary project person for the implementation of CBTA testing in authorization issues
- Collaborated with Agile Enablement practice team of coaches to adopt agile and transform the operations
- Creation of virtual authorization concept to restrict the user authorization on profitcenter basis
- Worked as part of remediation team and assist in the elimination of Segregation of Duties (SOD)
- Exclusively worked on objects to restrict access for reporting users and Setup security at the Info objects level
- Optimized data collection procedures and generated reports based on a weekly, monthly, and quarterly basis
- Experienced in data extraction, transformation, and loading (ETL) across different databases to SAP systems
- Develop policies and procedures for the collection and analysis of data