

# Bala Sirisha S P

Boston, MA 02120 • (617) 652-6318 • sripathi.b@northeastern.edu

<https://www.linkedin.com/in/bala-sirisha> • <https://github.com/SPBalaSirisha> • Available: May -December 2022

## Education

### Candidate for Master of Science, Data Science, GPA: 4/4.

Northeastern University, Khoury College of Computer Sciences, Boston

Expected: May 2023

- Coursework: Data Management and Processing, Data Visualization, Supervised Machine Learning, Unsupervised Machine Learning (Ongoing), Natural Language Processing (Ongoing).

### Bachelor of Technology, Electronics and Communication, GPA: 4/4.

Jawaharlal Nehru Technological University Hyderabad, Telangana, India

August 2020

- Coursework: Problem solving and data structures through C, Probability theory and stochastic processes, Basics of Database Management Systems, Python programming, Mathematics (Linear Algebra, calculus).
- Accomplishments: Class Rank #1/240, Gold Medalist, Finalist in Smart India Hackathon (Top 5 among 30,000 applicants, July 2019).

## Professional Experience

### Graduate Teaching Assistant

Jan 2022 – Present

Northeastern University, Khoury College of Computer Sciences

- Assisted for the course DA5030 - "Introduction to Data Mining and Machine Learning".
- Helped students develop a deeper understanding of data mining, supervised and unsupervised machine learning algorithms, and neural networks.

### IT Intern

May 2021 - July 2021

Synopsys Inc, Hyderabad, India

- Created an application utilizing Python and WebEx through which the employers in Synopsys can automatically create meeting invitations and send it to employees.
- Collaborated with colleagues and internal customers around the globe for SharePoint migration leveraging Sharegate.
- Coordinated with IT teams to resolve advanced computer software and hardware problems.

### Associate Engineer Intern

September 2020 - December 2020

L&T Technology Services, Mysore, India

- Devised robust solutions to meet client requirements and enhance functionality, scalability and performance of company's software applications, resulting in 33% revenue increase within 3 months.
- Built a "Performance Test Automation Framework" using JMeter, Jenkins, and PerfMon.
- Determined system loads and formulated improvement plans to increase the performance by 20%.

### Machine Learning Intern

May 2018 - June 2018

Verzeo, Hyderabad, India

- Developed a customer churn predictor system for banking industry by interpreting over 10k data samples based on more than 10 attributes including demographics.
- Attained an accuracy of 83% by deploying Neural Networks using Adam Optimizer and ReLU, sigmoid activation functions.

## Skills

- Programming Languages:** Python, C, R.
- Tools, Data Mining & Analysis:** Jupyter, JMeter, Postman, Git, Selenium, statistical data analysis, linear models, stochastic models, Data story-telling, Exploratory Data Analysis, MS Excel, dplyr, SQL.
- Technologies:** Machine learning Algorithms, Data Science pipeline (cleansing, wrangling, visualizing, modeling, Interpretation), Time-series analysis, Statistics, Linear Algebra, Python libraries (Scikit-Learn, NumPy, Pandas, Matplotlib, Seaborn, Keras, Tensorflow), Text Classification, Regression.
- Key Competencies:** Design thinking, Leadership, Public Speaking, Problem-Solving, Collaboration.
- Certifications:** Data analysis and visualization using Python - IBM, Machine Learning - Microsoft Technology Associate.

## Projects

### Facial Emotion Recognition, Northeastern University

November 2021 - November 2021

- Implemented supervised machine learning algorithms such as decision tree, random forests, KNN, gaussian naive bayes and convolutional neural network (VGG16) to detect and classify human emotions.
- Attained an accuracy of 60% for VGG16, 32% for KNN and 35% for Random Forest.

### Cryptocurrency Price prediction, Northeastern University

October 2021 - October 2021

- Conducted exploratory data analysis for last 5 years of 2036 types of Cryptocurrencies, extracted features and performed feature engineering.
- Implemented Decision Tree Regressor, Random Forest Regressor, XGBoost and LSTM (Long short-term memory) models to predict the price for the following month achieving an RMSE of 0.325.

### Loan Approval Prediction, Synopsys Inc.

August 2021 - August 2021

- Analyzed the data across few banks, extracted features and removed outliers from the data. Applied Random Forest, Logistic Regression, XG Boost and achieved an accuracy of 81%.

## Publications

- Bala Sirisha S P, Gaurav Sharma - "Towards the Era of Intelligent Machines: Artificial Intelligence", (Journal of Engineering Sciences", 28th October 2019).
- Bala Sirisha S P, Gaurav Sharma - "Compendium of Data Science", (Journal of Information and Computational Sciences", 29th August 2019).

## Leadership Experience

- Organized more than 40 events by representing as the Department Lead of Electronics and Communication Engineering branch, for the annual technical and cultural symposium. Facilitated meetings to discuss budget, sponsorships, initiatives, events and logistics.