(585)-880-6680
tg3789@rit.edu

Tarun Guntaka

Data Scientist

linkedin/tarunguntaka
github/tarunguntaka

An entry-level data scientist who takes pride in developing models that convert data points into business insights . I excel at collecting, analyzing, and interpreting large data-sets, developing new forecasting models, and managing data.

Education

Master of Science, Data Science, Rochester Institute of Technology, GPA: 3.44/4.00 **Jan 2021 — Dec 2022**
Bachelor of Science, Computer Science, Mahindra Ecole Centrale, GPA: 3.5/4.00 **Aug 2016 — Sep 2020**

Projects

Anomaly Detection for Predictive Maintenance in General Aviation **Sept 2021 — Present**
- Collaborate on a research project to identify various issues in General Aviation by applying graph neural networks.
- Forecast potential maintenance difficulties and lowering overall expenses through interpretation of flight data.
- Develop a multi-class classification model based on various maintenance issues.

ECG Aomaly Detection using LSTM-AutoEncoders **Feb 2020 — March 2020**
- Implemented an LSTM and Auto-encoder model to detect abnormal heartbeats in the ECG data.
- Reconstruct input as best as possible by minimizing a reconstruction loss function.
- Managed to attain 95% accuracy in detecting anomalies.

TED TALK Analysis using Sentimental Analysis and Neural Networks **May 2019 — June 2019**
- Built a Sentimental Analysis model on Ted Talks data-set.
- Constructed a Support vector machine model utilizing sentimental results to predict number of views for a specific Ted Talk.
- Presented a framework with an accuracy of 65% and later it was enhanced to 82% through Neural Networks.

Graphical User Interface for Care Sales Management System **May 2018 — June 2018**
- Designed a Graphical User Interface for a Car Sales Management System by combining Java and its libraries such as SWING, and AWT.
- Proposed a Car Sales System application that completely automates existing system. It handles new and used vehicles inventory, Front end customer booking, and billing.

Experience

Big Data Analytics Using Artificial Neural Networks (Intern) **May 2019 — June 2019**
National University of Singapore Singapore
- Designed Regression and classification algorithms such as Linear Regression, Logistic Regression, Decision Trees, XGBoost, Discriminant Analysis and used various sampling techniques on standardized data to predict fraudulent transactions; best model was Random Forest with an F1 score of 0.92.

Applied Deep Learning (Intern) **May 2019 — June 2019**
Hewlett-Packard Singapore
- Cooperated with NUS and HP faculty to build and design a Big Data model based on a Hadoop cluster with 4 nodes to compute word count for a TB-sized document in a distributed system.

Data Science (Intern) **May 2018 — June 2018**
Verzio Hyderabad, India
- Identified elements causing attrition for a local food delivery application and conducted cohort analysis of customer life cycle stages.
- Investigated customer churn through various Machine Learning models such as Logistic Regression, Decision Trees, XGBoost, and assessed them, XGBoost had the best accuracy of 84% with a precision of 0.67.
- Recognized 85% of customers likely to churn, collaborated with cross-functional team to devise marketing strategies like special offers,saved $100k of revenue being lost.

Skills

Tools and Languages	Python (Sklearn, Numpy, Pandas), Git, LaTeX, Java, Tensorflow, Pytorch
Quantitative Research	Mathematical optimization, Mathematical Modeling, R, MySQL
Communication	English, Telugu

Leadership Experience

Admin, Gaming Club **Aug 2018 — Aug 2020**
- Led a Team of 20 members in monitoring and conducting different e-sport tournaments.

Make A Difference, NGO **Jan 2018 — Jan 2019**
- Executed public affairs operations, community relations and volunteered as Academic Support for MAD; Non profit organization, with a vision for better outcomes for children in shelters.