B Gopi Sumanth Bhaskar

GitHub: https://github.com/GopiSumanth, **LinkedIn:** https://www.linkedin.com/in/gopi-b/
Phone: +91-7986737285, **Email:** gopisumanth@outlook.com, **Date of Birth:** February 18, 1996

Education

South Asian University (SAU), New Delhi (May 2019)

- M.Sc. Computer Science (Machine Learning**)** **CGPA: 8.45/9.0**
- **Coursework:** Machine Learning, Fuzzy Modelling, Probability, Optimization
- **Thesis:** Zone based Path Planning and Task Allocation in Mobile Robots using Evolutionary Algorithms

Lovely Professional University (LPU), Punjab (June 2017)

- B. Tech. Computer Science and Engineering **CGPA: 7.77/10**
- **Coursework:** Design and Analysis of Algorithms, Data Structures, Linear Algebra, Programming in C++
- **Capstone Project:** Offline Signature Verification and Detection using Artificial Neural Networks

Experience

Semantic Web India (December 2020 - present)
Data Science Engineer

- Building scalable products to solve NLP problems in the domain of Healthcare using Semantic AI.

CSIR – Indian Institute of Chemical Technology (December 2019 – November 2020)
Research Assistant

- Implemented an LSTM model that predicts sudden outbreaks of dengue disease in Kerala state.
- Reduced the hyperparameter tuning cost using Bayesian optimization.
- Compared the main Supervised Learning techniques and Statistical methods: Feature Engineering, Regression (SVM, GBDT and VAR)
- Collaborative research on time series analysis with NIPER, Guwahati and CSIR-4PI, Bengaluru.
- Construct various ML and DL models to forecast Malaria Cases in North East Indian States.

Certifications

- Certificate Course on Data Analysis at CSIR-IICT, Hyderabad (August 2019 – October 2019)

Coursera:

- Custom Models, Layers, and Loss Functions with TensorFlow: certificate
- Web Application Technologies and Django: certificate
- Web of Data: certificate
- Big Data, Genes, and Medicine: certificate
- Deep Learning Specialization (set of 5 courses): certificate
- TensorFlow in Practice Specialization (set of 4 courses): certificate
- Machine Learning: certificate
- Python for Data Science and AI : certificate, badge
- Practical Time Series Analysis: certificate

Data Camp:

- Python Programming: certificate
- Python Data Science Toolbox: certificate_1 , certificate_2
- Intermediate Python: certificate

Projects

High Performance Liquid Chromatography (September 2020 – November 2020)

- The objective is to find an optimized formula for our formulation with the reduction in the excipient amount but without compromising the desirable quality.
- Implemented using genetic algorithm-based ANN

Identifying Protein Signatures in Type2 Diabetes Mellitus (April 2020 – August 2020)

- The Objective is to find serum protein signature of coronary artery disease in type 2 diabetes mellitus.
- Implemented using K-NN, Logistic Regression, SVM, Decision Trees, and Random Forest.

Forecasting Dengue Cases in Kerala (December 2019 – March 2020)

- Using time series between 2006 to 2015 predicted the number of dengue cases of 2016 and 2017.
- Forecasted the number of dengue cases for the year 2018.
- Implemented using LSTM, SVM, GBDT and VAR.

Microsoft Malware Detection (November 2019)

- Using Microsoft malware multi-class data from Kaggle, developed a malware detection engine.
- Implemented using Random Forest and XgBoost.
- This engine helps in identifying whether a given piece of file/software is malware.

Facebook Link Prediction (October 2019)

- Using Facebook social graph data, developed a link recommendation engine based on GBDT.
- Primarily based on the research done on Single Value Decomposition method during Netflix Prize competition.

Human Activity Recognition (September 2019)

- The goal is to detect human activities viz., Standing, Sitting, and walking etc. using time series data.
- Implemented using Logistic Regression, SVM, Random Forest and LSTM.

Personalized Cancer Diagnosis (August 2019)

- The objective is to detect cancer-causing mutations from corpus of related literature.
- Helps in reducing latency of cancer detection.

Amazon Reviews Sentiment Prediction (July 2019)

- The aim is to predict the sentiment of the review.
- Implemented various ML models like Logistic Regression, K-NN, Naïve Bayes, SVM, Decision Tree, Random Forest, XgBoost, PCA and T-SNE.

Publication

- **Bhaskar, B.G.S** et.al (2019). Zone-based Path Planning of a Mobile Robot using Genetic Algorithm. International Conference on Industry 4.0 and Advanced Manufacturing at IISc Bengaluru.

Skills / Interests

- **Computer Programming:** Proficiency in C/C++, Python, MATLAB, SQL and R.
- **Frameworks and Toolkits:** Pandas, Numpy, Scikit-learn, TensorFlow, ArcGIS, Django.
- **Languages:** Proficiency in English, Telugu and Hindi.
- **Hobbies:** Reading Vedic Literature, Community Work, Playing Chess, and Socializing with friends and family.

Achievements

- President's and Merit Scholarship holder at South Asian University (August 2017 – May 2019)
- Class Representative for Department of Computer Science at SAU (August 2017 – May 2019)
- Web Developer and Web Designer for the Event Uttar Bhartiya Chhatra Sansad Conducted in Lovely Professional University (October 2016)
- Certificate of Excellence from Robo Tech Labs in Mobile Robotics workshop at Lovely Professional University (February 2014)
- Class Representative of my Section at Lovely Professional University (August 2013 – May 2017)
- Captain of Patel House for Two Years and held the responsibility of two hundred students at D.A.V Public School (June 2009 – April 2011)
- Certificate of Participation in 16th National Children's Science Congress at Raman School of Advanced Education, Visakhapatnam, 2008
- Qualified GATE (CSE) in (February 2019)
- Qualified UGC NET (LS) in (December 2018)

Conferences / Workshops

- National Seminar on Beyond Valorization of Sustainable Knowledge in Oleochemicals, IICT, 2019
- International Conference on Industry 4.0 and Advanced Manufacturing, IISC, 2019
- International Workshop on Emerging Trends in IOT and Machine Learning, SAU, 2019
- Winter School on Artificial Intelligence, IIIT Delhi, 2019
- International Workshop on Evolutionary Algorithms and Applications, SAU,2018
- International Workshop on Computational Intelligence and Machine Learning, SAU,2017