

#### PROFESSIONAL EXPERIENCE

- **Data Scientist** at Bing, Microsoft India Development Center, Hyderabad *June 2018- Present*
  - Working in Bing Retail Segment
  - Designed a neural network for product SKU embedding using autoencoder and variational autoencoder
  - Implemented a deep network for image to query mapping using ResNet architecture
  - Defined evaluation metrics of user engagement on follow up query impressions of a given experience
  - Designed a ranking function to rank explore more suggestion using positional bias and click stream data
  - Currently working on object segmentation of fashion images. Training mask-rcnn for fashion dataset
- **Researcher** at Knowledge Discovery Lab, NEC Central Research Laboratory, Japan *July 2016- December 2017*
  - Implemented different architectures of deep neural network like feed forward network, convolution network, recurrent networks like LSTM, GRU etc
  - Designed a semantic parser using LSTM in torch Achieved **84.4%** accuracy on Geoquery data-set
  - Developed an explainable network using deep neural network which explains its output using interpretable components. Achieved **90.3%** accuracy on sentiment analysis data-set with manually designed interpretable components

#### AREA OF INTEREST

Machine learning, Natural Language Processing, Algorithms, Data Structures, Statistics and Databases

#### ACADEMIC ACHIEVEMENTS

| Examination     | University | Institute                | Year | CPI/% |
|-----------------|------------|--------------------------|------|-------|
| Post Graduation | IIT Bombay | IIT Bombay               | 2016 | 9.29  |
| Graduation      | UPTU       | ABES Engineering College | 2012 | 79.20 |
| Intermediate    | UP Board   | J.A.S. Inter College     | 2008 | 71    |
| Matriculation   | UP Board   | J.A.S. Inter College     | 2006 | 72    |

#### MAJOR PROJECTS AND SEMINARS

- Designed a generalized pattern miner framework to extract the set of patterns using Sub-Modular Optimization
- Implemented logistic regression model for classification in R with **70%** accuracy on Heart Disease Data
- Implemented NEO-Kmeans clustering in MATLAB using L-BFGS algorithm
- Developed a Part of Speech Tagging system for English sentences with **94.07%** accuracy on brown corpus using HMM(Hidden Markov Model)
- Implemented phrase-table triangulation method for pivot-based machine translation with 0.5% incremented in BLEU score for Hindi-Bengali language using English as pivot language.
- Developed a system in MATLAB which takes an image as input and outputs various similar images by extracting various features of Images like contrast, mean color, histogram etc

#### SKILLS

**Programming:** C,C++,Python,Java,Matlab

**Tools:** Keras,Tensorflow,Scikit-learn,Numpy,Matplotlib,Latex,Git,Inkscape,Microsoft Visual Studio

#### COURSES

Fundamentals of Machine Learning, Statistical Inference, Convex Optimization, Natural Language Processing, Topics in Natural Language Processing, Algorithm and Complexity, Implementation Techniques in DBMS, Advanced Compiler, Artificial Intelligence, Linear Optimization, Probabilistic Models, Engineering as a cloud

#### ACADEMIC ACHIEVEMENTS

- **3<sup>rd</sup>** Rank in Retail Hackathon in Microsoft Hackathon 2018 for innovative idea
- All India Rank 59 in GATE 2014 among 1,55,190 candidates
- **3<sup>rd</sup>** Rank in Bulandshahar district-level science exhibition 2006-07
- **3<sup>rd</sup>** Rank in programming event in FUSION'10, ABES Eng. College (College Tech.Event)
- **3<sup>rd</sup>** Rank in computer tournament in Fest-With-Zest'10, ABES Eng. College (CollegeTech. Event)