Senthil Kumar

Data Scientist | NLP Practitioner |
Espouses Python Best Practices

Competent in the use of ML and DL for NLP tasks,
Proficient in Python-Data Science Project Execution,
Perpetual learner of the art of effective communication

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Chennai, India 📍

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github.com/senthilkumarm1901 ⭘

WORK EXPERIENCE

Deputy Manager | Senior Data Scientist
Ford Analytics Division - ML CoE Team

05/2018 - Present   *Chennai, India*

Roles
- **Individual contributor/developer:** Employ state-of-the-art/best-suited ML and DL techniques for NLP Applications
- **Co-develop end-to-end NLP applications**: from data acquisition, cleaning, labeling, preprocessing, model development till deployment
- **Python/NLP Trainer | Interviewer of NLP Candidates across Analytics teams**

Assistant Manager
LatentView Analytics

04/2014 - 04/2018   *Chennai, India*

Roles
- **Individual contributor [2.5 yrs] | Team Manager [1.5 yrs] | Social Media Analysis | NLP Projects**
- **LinkedIn Recommendation Excerpt**: "... and extraordinary dedication all contributed significantly to growing our analytic practice - in size, output and level of insights achieved..." - Client stakeholder from a F100 Tech Major
- **LinkedIn Recommendation Excerpt:** "....Sincere, driven, articulate and utterly committed ... His communication skills have been exemplary, always crystal clear ..." - My Reporting Manager

Senior Consultant
Capgemini

01/2014 - 03/2014   *Bangalore, India*

Lead Analyst
Beroe Inc - A Procurement Intelligence Firm

07/2010 - 12/2013   *Chennai, India*

COURSE WORK

Deeplearning.ai-Coursera 5-course Specialization
 (11/2018 - 05/2019) ⤢

GCP Big Data & ML Fundamentals (03/2021 - 04/2021) ⤢

EDUCATION

B.E - Electronics & Communication - 8.6 CGPA
Madras Institute of Technology, Chennai

2006 - 2010

Twelfth Grade - 95% | Tenth Grade - 92%
Sri Sankara Vidyalaya School, Chennai

KEY SKILLS

Rules, Linguistic & Statistical NLP

Python Best Practices

Deep Learning for NLP

Machine Learning Projects Execution

KEY PROJECTS

BERT Fine-tuned Sequence Classification
Aspect-based Sentiment Analysis Pipeline ⤢

Token Classification (NER)
Replace Personally Identifiable Information ⤢
using an ensemble of Rules, Spacy & Transformer-powered NER models

Unsupervised Text Clustering Pipeline
Utilizing Transfer Learning OR Traditional NLP ⤢
using Sentence Embeddings+Clustering OR prior topic-word-guided Topic Modeling

TECHNICAL SKILLS

Traditional NLP Techniques
Text data wrangling/cleaning (using regex, lemma, stemming, etc.,) ~ Embedding (TFIDF, W2V, Glove,etc.,), ~ Topic Modeling ~ Clustering

Modern DL-based NLP Techniques
BERT and other transformer-based Language models ~ Text classification including Sentiment Analysis ~ Named Entity Recognition ~ Semantic Search ~TL-powered Clustering

NLP Libraries - Spacy, PyTorch & its Ecosystem
*Spacy for tokenization, rules-based matching, linguistic features, custom-model training using GPU and transformers | Native PyTorch modelling, **Huggingface Transformers** (built on top of Pytorch pipeline), **Sentence-transformers***

Other Data Science Libraries
*Extensive use of **Sklearn, Pandas, Numpy** and **Altair** (for visualization) ~ basics of **PySpark** ~ **multiprocessing** ~ **Fastapi** for REST API and **Streamlit** for prototype UI*

ML Project Management Best Practices
***GitHub** Best practices ~ Set up of **WSL**/ **Linux** OS ~ Virtual environments extensively used - **Poetry**, **venv** and **conda** ~ Pytests ~ Leverage **Docker** for GPU-centric development ~ Basics of **Kubernetes** to deploy REST APIs or UIs*

HONORS

Promoted from Snr Analyst to Deputy Mgr (11/2019)
After 1.5 years of joining Ford

Ford Asia-pacific Recognition Award (05/2019)
Successful spearheading of a Project

Promoted from Snr Analyst to Assistant Mgr (10/2016)
After 2.5 years of joining LatentView

LatentView Analytics - Encore Award
For company-wide best performance for Jul-Sep 2016 Quarter

Promoted twice in Beroe
During my 3.5 year stint at this first company

Scored centum in Physical Science Engg Entrance Exam
1 of 7 individuals from Tamil Nadu to score centum in 2006