Mrityunjay Kumar

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EDUCATION

Maulana Azad National Institute Of Technology

Bachelor of Technology in Computer Science and Engineering; GPA: 7.85/10.0

Bhopal, India

Aug. 2010 - May. 2014

Programming Skills

C, C++, Python NLTK, Sci-kit, NumPy

Data Structure and Algorithms

EXPERIENCE

Talentica Software

Software Engineer - Data Science

• Cloud Sync Application:

Pune, India April 2016 - Present

[Python,C++,File System]

Smart File system service to allow two way delta sync Key Features:

- Add and remove origin folders to sync
- Push Annotated files back to user
- Multi-platform silent auto-update framework
- Sharing of content across Multi-tenant architecture

o Search Engine:

[Machine Learning, NLP, Deep Learning, Python, Neo4j]

A topic modelling based domain specific search engine model for handling large documents and providing intent based search retrieval.

Key Features:

- On-line Ontology enhancer & Parser
- Designed in-line query expansion w.r.t Ontology - Loss less Text Extraction
- Used LDA/LSA to generate document vectors
- Used graph DB for faster query processing and retrieval
- Automated ontology formation based on domain knowledge
- Clustering of documents with deep learning to understand the underneath context

o Image Processing:

[Machine Learning,OpenCV]

A POC which runs various ML algorithm on image data Implementations Done:

- Clustering all color patterns contained in image logo
- Identifying mobile numbers in scanned pdf
- Extracting normal text from images

Mediatek

Software Engineer

Noida, India Aug 2014 - April 2016

[C,MTK Native OS]

o Audio Player:

Entitled Major Ownership for Audio player in feature phones Role and Responsibilities:

- Implementation of new requirements and assisted bug resolution
- Implemented user defined play list [generation, delete, sharing]
- Implemented new BT stack into Audio Player
- Modified AUDIO Play engine for asynchronous event handling

## o Combo Tool:

 $[C++,MFC,PCAP,OS\ Native\ Layer]$ 

GUI Tool for processing modular commands for various system level test. Key Features:

- Implemented wrapper for WIN32 API for interacting with POSIX lib
- Implemented event driven asynchronous architecture
- Implemented packet data interfaces: Serial, RS232, Ethernet, USB

• GPS Logger: [Java,GPS Port Layer]

GUI Tool for monitoring online NMEA data from GPS Port.

Key Features:

- Designed a pipeline system where Logger tool and android application can run benchmarking test cases.

# ACADEMIC / PERSONAL PROJECTS

## • Product feature and Opinion extraction of Amazon dataset:

Prof. Saritha Khetawat

[NLTK,Python]

- Implemented Logistic regression to model product sentiments using HMM
- Implemented detection of explicit features and opinion extraction in dataset
- Used graph DB to store the reviews about features

#### • Semantic Orientation Of Twitter Data:

Prof. Saritha Khetawat

[Java, Stanford Parser, Senti-wordnet, ML]

- Implemented classification for important aspect about a tweet
- Implemented semi-supervised score provider word polarity
- Listed user provided sentiment for key features about particular product.

## • Personal computer Assistant :

Key Features:

[Python-falcon,ML-msg.ai,C++]

- GUI Tool for quick access to recent activities at PC.
- Maintaining permanent system cache for all favorite processes
- Desktop service : Playing music/movies/finding docs
- Web services: Top rated movies at IMDb, Wikipedia keyword information, Dictionary

### CERTIFICATION & MOOCŚ ATTENDED

• Machine Leaning Specialization:

COURSERA [2/5]

Machine Learning : Basic Statistics :

COURSERA [3/5]

• Probabilistic Graphical Model :

COURSERA [completed]
COURSERA [1/3]

• Python for Everybody Specialization:

COURSERA [completed]