Mrityunjay Kumar

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**EDUCATION** 

Maulana Azad National Institute Of Technology

Bhopal, India

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

Aug. 2010 - May. 2014

Programming Skills

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

Data Structure and Algorithms

EXPERIENCE

Talentica Software

Pune, India

[Python]

Senior Software Engineer - Machine Learning

April 2016 - Present

• Indoor Location Positioning:

[Python,tensorflow]

Developing live indoor location tracking model

Key Features:

- A probabilistic approach for context aware positioning using BLE signals

• Single cell Identity Classification:

[Python, opency, tensorflow]

Proposed Developing automated single cell detection using neural networks Key Features:

- Modelling a novel approach for detecting structure of single cells

• NLP Pipeline:

Developing extensive Language Processing pipeline model

**Key Features:** 

- A Novel algorithm for unlabelled text modelling
- Keyword Extraction and Text Classification
- Automated pipeline to release stream ML Models to External Cloud
- External Integration : Slack Bot, Alexa Skills

• Cloud Sync Application:

[Python,C++,File System]

A File system service which allows selective two way delta sync

Key Features:

- Push Annotated files back to user
- Multi-platform silent auto-update framework
- Sharing of content across Multi-tenant architecture

• 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:

- Online Ontology enhancer & Parser
- Designed in-line query expansion using Ontology
- Used graph DB for faster query processing and retrieval
- Automated formation ontology based on domain knowledge
- Clustering of documents with deep learning to understand the underneath context

Mediatek

Noida, India Aug 2014 - April 2016

Software Engineer

[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]
- Integrated new BT stack into Audio Player

#### o Combo Tool:

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

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

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

o **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.

# **PUBLICATIONS**

# Recognizing Question Styles Using a Semi-Supervised Approach Mrityunjay Kumar, Guntur Ravindra

Talentica Software, India Draft

# ACADEMIC / PERSONAL PROJECTS

# • Product feature and Opinion extraction of Amazon dataset:

Prof. Saritha Khetawat

[NLTK,Python]

- 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 & MOOCS ATTENDED

Machine Learning :

 Basic Statistics :
 Deep Learning:
 Natural Language Processing:
 Python for Everybody Specialization:

COURSERA
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COURSERA