# Ashish Upadhyay

Google Scholar ashish.iiitnr@gmail.com | +91-7979065989

# **EDUCATION**

## **IIIT NAYA RAIPUR**

BTECH
COMPUTER SCIENCE AND
ENGINEERING
June 2019 | Raipur, CG
CGPA: 8.33

# LINKS

Github://panditu2015 LinkedIn://ashishu007 Facebook://panditu2016 Twitter://@rvaaau

## COURSEWORK

Artificial Intelligence
Deep Learning
Advanced Machine Learning
Machine Learning
Big Data & Cloud Computing
Internet of Things
Computer Vision
Data Mining & Data Warehousing

# **SKILLS**

## **PROGRAMMING**

Python • R • Java Javascript • C • C++ SQL • Matlab • ATEX

## **FRAMEWORKS**

Data Science

Keras • Tensorflow • Scikit-Learn Pandas • Matplotlib • ROS NumPy • OpenCV • NLTK

Development

Docker • Flask

SQLAlchemy • PostgreSQL

React.js • UML • ThingSpeak

#### **ALGORITHMS**

Ensemble Methods • k-NN Random Forest • Xg Boost Naive Bayes • k-Means CNN • RNN • LSTM

# **INTERESTS**

Autonomous Path Planning Data Science Machine (& Deep) Learning Natural Language Processing

## **EXPERIENCE**

## ROBERT GORDON UNIVERSITY | NLP/ML RESEARCH INTERN

Information Extraction and Requirement Mapping in Regulatory Documents

- Information Extraction from Oil and Gas regulatory documents,
- Classifying compliance requirements and mapping them to different taxonomies of people and equipment.
- Successfully classified highly imbalanced text datasets with high F1 score.

## NATIONAL INFORMATICS CENTRE | DEEP LEARNING INTERN

Pronunciation Similarity Matching using Deep Learning

- Developed a Client-server model for pronunciation matching.
- Extracted the MFCC features from speech to train a CNN model in Keras.
- Model to be used by school students of Chhattisgarh.

# ROBERT GORDON UNIVERSITY | Machine Learning Intern

Machine Learning and Optimization in Supply-Chain Management

- Automated the task of creating jobs of picking items from different places in Scotland and minimizing the number of trucks used.
- Developed an API using Flask and Vue.js.

#### **IIITM GWALIOR** | AI & ROBOTICS INTERN

UAV-Robot Relationship for Coordination of Robots on a Collision Free Path

• Developed an algorithm using A\* & Probabilistic Road Map for the coordination of multiple robots on a collision free path using an UAV. [Published Paper].

# **ACADEMIC PROJECTS**

- Coordination of Intelligent Agents on a Pre-Defined Path using PSO. [GitHub]
- Twitter Sentiment Analysis of the Policies of Modi Government. [GitHub]
- Handwritten Character Recognition using Deep Learning. [GitHub]
- IIoT: Use of IoT in Petroleum Industry Automation.
- Analysis of Different FISs used in Decision Making for Secondary Users in Cognitive Radio Network. [Published Paper]

# **ACHIEVEMENTS**

- Studentship at RGU: £1231 per month during  $8^{th}$  semester internship.
- Studentship at RGU: £1000 per month during summer internship.
- Member of Core Team: Technovate 2018 (Techno-Cultural Fest of IIIT-NR).
- Member of Organizing Team: Industry-Academia Meet 2017, IIIT-NR.
- Head Organizer: Connaissance 2016 (Literary cum Cultural Fest of IIIT-NR).
- 2nd Runner-up: Breaking Bugs, Technovate 2017 (Code De-Bugging).
- Best Delegate: Divya Jyoti National Youth Parliament 2017, Raipur.

## **PUBLICATIONS**

- [1] S. Tripathi, A. Upadhyay, S. Kotyan, and S. Yadav. Analysis and comparison of different fuzzy inference systems used in decision making for secondary users in cognitive radio network. *Wireless Personal Communications*, 104(3):1175–1208, 2019.
- [2] A. Upadhyay, K. R. Shrimali, and A. Shukla. Uav-robot relationship for coordination of robots on a collision free path. *Procedia Computer Science*, 133:424–431, 2018.