DIPALI AGARWAL

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| **ACADEMIC DETAILS** | | | | | |
| **COURSE** | **SPECIALIZATION** | **INSTITUTE/COLLEGE** | **BOARD/UNIVERSITY** | **% CGPA** | **PASSING YEAR** |
| B.E. (Hons.) | Electronics and Instrumentation | BITS Pilani Goa Campus | BITS Pilani | 8.35/10 | 2016 |
| 12th standard | Science | Jai Academy, Jhansi | CBSE | 92% | 2012 |
| 10th standard | General | Kendriya Vidyalaya No.1, Gwalior | CBSE | 9.8/10 | 2010 |

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| **TECHNICAL PROFICIENCY AND CERTIFICATIONS** | |
| **Technical Proficiency** | Python, Machine Learning, NLP, BASE SAS, Oracle, MongoDB, UNIX, GitHub |
| **Certifications** | Artificial Intelligence and Machine Learning, IIIT-Hyderabad, BASE SAS, American  Health Management 250 |

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| **PROFESSIONAL EXPERIENCE:** Work experience of 3 years and 10 months |
| **DATA SCIENTIST, UNITED HEALTH GROUP (MAY 2019 -PRESENT)**  **Heading Extraction from Scanned Patient Documents:**   * Objective was to digitize medical records and develop an automated table of contents * Reduced time to review cases by 10-20 min per case resulting in annual cost reduction of 1.2 million dollars * Developed a module to create bounding boxes on text of the document and classify them into potential headings using **image processing** and **NLP based techniques**, managed to achieve **80% precision and 85% recall**   **Entity Matching on Text Data:**   * Objective was to match a provider record from a third-party list to the existing pool of all records, in order to make decision whether there is a need to create a new record in the database * Extracted features for the demographic entities using **Fuzz logics** and **NLP** and trained a **Random Forest Model**   for prediction, attained **recall of 95%**   * Engaged in deploying the solution to the production   **Data Quality Tool Development:**   * Involved in understanding and requirement gathering from business stakeholders * Designed and developed a Scoring Module for Data Validation and Data Consistency checks as a part of a Data Quality Framework, implemented using **Python** * Managed to automatically back track the issues in the data for possible rectification   **ML Training Sessions:**   * Imparted 6 hours classroom training to a batch of 30 participants on Machine Learning, as part of the Optum Tech University Program   **SENIOR DATA ANALYST, UNITED HEALTH GROUP (MAR 2019 – APR 2019)**  **Prediction of High Cost Claimants on Health Insurance Policy**   * Worked on a POC to predict High Cost Claimants on Health Insurance Policy, using member demographic and claims data, aimed to add value to Custom Reports used for resource management by United Health Care * Performed EDA and identified relevant features, handled data ambiguity and class imbalance, implemented Xgboost along with regularization techniques to develop the model   **DATA ANALYST, UNITED HEALTH GROUP (JUL 2016 – FEB 2019)**   * Responsible to analyze the clinical data, draw insights and generate the reports using SAS scripts for the same * Worked as a .net developer for web-based reporting website called LaunchPad Application, enhanced the website functionality by adding new features time to time |

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| **Machine Learning Hackathons** |
| **WOMEN IN TECH HACKATHON BY IBM (JUN 2020)**   * Developed a question-answering system able to answer (almost) any kind of question related to coronavirus using a pool of 50k+ research papers on Covid19 * Used **Okapi BM25 algorithm** to find the relevant context and then applied BERT embeddings followed by cosine similarity to find the answer to the user query * Integrated the solution with **IBM Watson Assistant** to provide a **Chatbot** user interface to the solution   **IMAGE PROCESSING, AIML Program, IIIT- Hyd (AUG 2018)**   * Built a face recognition system based on **Siamese Network** (one shot learning) * Added the functionality for expression recognition among classes of varied gestures   **SPEECH RECOGNITION, AIML Program, IIIT- Hyd (OCT 2018)**   * Gathered thousands of samples of distinct voices for the count of 1-10 * Extracted the features using **CNN**, and applied SVM to classify the voice in the classes of 1-10 * Built a voice interactive food ordering system with accuracy of around 70% |

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| **POSITION OF RESPONSIBILITIES** |
| **MENTOR – ARTIFICIAL INTELLIGENCE & MACHINE LEARNING PROGRAM, IIIT-HYDERABAD (NOV 2018- JUN 2019)**   * Mentored a batch of 50 participants, responsible to address their queries related to AI-ML topics and guided them during Lab sessions and Hackathons   **EVENT MANAGER –DIGILOGICA, QUARK’14, BITS PILANI GOA (FEB 2014)**   * Conducted the flagship event of electrify panel focusing on digital electronics in the annual technical festival, observed participation of 300+ students from all over the country |

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| **ACHIEVEMENTS AND AWARDS** |
| * **Winner** of Dev Days event in Artificial Intelligence Track at UHG,2018 * Received **5+ BRAVO recognitions** for extra-ordinary performance at OPTUM, 2016-2020 * Awarded Merit Certificate for achieving **All India Rank 44** in Junior Mathematical Olympiad, 2010 * Awarded **Distinctive Performance** in National Science Olympiad, 2009 |