ADITYA D BHAT

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EDUCATION

Bachelor of Technology (B.Tech), Computer Science And Engineering with Specialization in Data Science PES University, Bangalore, CGPA: 8.8/10.00 2015 - 2019

RELEVANT COURSES

Data Structure, Design and Analysis of Algorithms, DBMS, Discrete Math and Logic, Linear Algebra, Operating Systems, Computer Networks, Software Engineering, Web Technologies, Data Science, Data Analytics, Big Data, Natural Language Processing, Machine Learning, Digital Image Processing, Social Network Analytics, Blockchain.

SKILLS AND INTERESTS

Interests	Data Science, Machine Learning, Deep Learning, Natural Language Processing, Web Technologies and Networking
Programming Languages	C, Python, Javascript
Tools and Technologies	ReactJS, NodeJS, Keras, TensorFlow, MongoDB, Express PostgreSQL, MySQL, Pandas, Numpy, OpenCV, Scikit-learn

PROJECTS

Neural Net from scratch - Keras style modular implementation of a DNN with layers for Dense, Reshape, Activations, optimizers - SGD, Adam, etc. and loss functions. 2020

Speech Transcription - End-to-End ASR Pipeline to transcribe speech to text using CNNs and variants of RNNs trained on acoustic features like MFCCs and spectrograms. 2020

Automatic Text Summarization - of Amazon Food Reviews using a Seq2Seq model in TensorFlow. 2020

Parts of Speech Tagging - Hidden Markov Model based POS Tagger using the Pomegranate library. 2020

Classifying and Summarizing Legal Judgments (Final Year Thesis) 2019

Developed an NLP system working with two teammates, to classify and summarize Indian Legal Judgments using Deep Learning. Focused on Sentence-Paragraph level encoding, Capsule Networks for Text Classification and Unsupervised Text Summarization.

NLP Course Project - A simple chatbot using the Seq2Seq architecture implemented in PyTorch. 2018

EXPERIENCE

R&D Engineer - Hewlett Packard Enterprise, Bangalore, India July 2019-Present

- Independently working on Tool Development and Data Mining to build intelligent applications that help improve engineering productivity. Created a dataset to characterize over 1200+ Network Stress Test Cases and developed a Smart Triage and Test Execution Tool - reducing manual effort of the Triage Team by 50%.
- Developed the Aruba Bangalore Lab Reservation Tool working alongside a teammate. Features include Network Auto-Discovery, Inventory Control, Utilization Analytics and Stats, remote authentication using LDAP, etc. Tech Stack: Python, ReactJS, NodeJS MongoDB, scikit-learn.
- Worked with a team of two members to build a Health Monitor for Aruba Switch Builds. Also, mentoring five Interns at Aruba Networks, HPE.

INTERNSHIPS AND RESEARCH

R&D Intern - Hewlett Packard Enterprise, Bangalore, India Jan-July 2019

Worked on Automation of Network Switching Protocols such as OSPF, ARP, MAC, etc. Built a library to automate reporting of ARP Scale Characterization, reducing the manual effort that goes into generating it.

Research Intern , CCBD (Centre for Cloud Computing and Big Data) Sep 2017-Jan 2019

PES University, Bangalore. Worked on applied Deep Learning in Automatic Speech Recognition for the language Kannada. Focused on syllable segmentation, mispronunciation detection using Self-Organizing Maps and rating the word pronunciation using deep learning architectures.

Research Associate - Centre for Pattern recognition and Machine Intelligence Sep 2017- Jan 2019
PES University, Bangalore.Worked on projects on Face Recognition under guidance Prof. Vinay A, funded by the Govt. of Karnataka. Explored Classification using SVM, Random Forests, Gradient Boosting, and ResNet.

Machine Learning Intern - Pattern Effects Labs, Bangalore May-Aug 2018
Focused on developing machine learning models for intra-day stock trading. Researched on technical indicators, gradient boosting, ensemble learning, neural networks and used custom metrics to fine-tune hyper-parameters.

PUBLICATIONS

- Acharya, H.R., Bhat, A., K.,A., & Srinath, R., 'LegoNet - Classification and Extractive Summarization of Indian Legal Judgments with Capsule Networks and Sentence Embeddings', Journal of Intelligent & Fuzzy Systems.
- Bhat, Aditya et al. "A Novel Solution to the Curse of Dimensionality in Using KNNs for Image Classification." 2019 2nd International Conference on Intelligent Autonomous Systems (ICoIAS) (2019): 32-36.
- Murthy, Savitha et al. "Kannada Kali: A Smartphone Application for Evaluating Spoken Kannada Words and Detecting Mispronunciations Using Self Organizing Maps." 2018 IEEE Tenth International Conference on Technology for Education (T4E) (2018): 1-7.
- Murthy, Savitha et al. "Pronunciation Training on Isolated Kannada Words Using "Kannada Kali" - A Cloud Based Smart Phone Application." 2018 IEEE International Conference on Cloud Computing in Emerging Markets (CCEM) (2018): 57-64.
- Vinay, A. et al. "An Efficient ORB based Face Recognition framework for Human-Robot Interaction." Procedia Computer Science 133 (2018): 913-923.

ACHIEVEMENTS AND EXTRA-CURRICULAR ACTIVITIES

- Gave a Coffee Talk at HPE R&D to release and demo the Aruba Bangalore Reservation Tool to an audience of 150+ Engineers and Management. 2019
- Received the CNR Rao Merit Scholarship Award in Nov 2018. Received distinction award in all semesters of undergraduate studies at PES University. 2015-2019
- POC titled "Kannada Kali - Learning Languages Made Easy", at IEEE Pre-Conference on Cloud Computing for Emerging Markets (2018), received the Best Paper/POC Award among 40+ Teams. 2018
- Member of ACM PES University Student Chapter. 2017-2019
- Attended a workshop on 'Cloud Computing and Big Data' at PES University by Prof. Dinkar Sitaram. 2017
- Member of Scouts and Rotaract Club at Swargarani School - volunteering to help with all events that were held at the school, and helping organize treks, camping events, etc. as a part of scouting. 2008-2013