

23 Sarvodaya Colony, Police Lines, Ajmer - 305001

Education

Indian Institute of Science

Bengaluru, India

PHD IN COMPUTATIONAL AND DATA SCIENCES (ADVISED BY PROF. R. VENKATESH BABU)

August 2019

- Courses: Game Theory: A+, Pattern Recognition and Neural Networks: A, Stochastic Methods and Applications: A+, Video Analytics: A+, Deep Learning for Computer Vision: A+, Advanced Image Processing: A+
- Cumulative Performance Index (GPA): 9.83/10

Indian Institute Of Technology (BHU) Varanasi

Varanasi, India

B.Tech. (Hons) in Computer Science and Engineering

July 2015 - May 2019

- Department Rank 2 in Sophomore year with AP (Exceptional Performance) Grade in Artificial Intelligence.
- Cumulative Performance Index (GPA): 9.44/10

Publications

CONFERENCE PUBLICATIONS

Class Balancing GAN with a Classifier in the Loop Harsh Rangwani, Konda Reddy Mopuri, R Venkatesh Babu UAI (2021). 2021

S ³ VAADA: Submodular Subset Selection for Virtual Adversarial Active Domain Adaptation Harsh Rangwani, Arihant Jain, Sumukh K Aithal, R Venkatesh Babu ICCV (2021). 2021

Workshop Proceedings

NLPRL-IITBHU at SemEval-2018 Task 3: Combining linguistic features and emoji pre-trained CNN for irony detection in tweets Harsh Rangwani, Devang Kulshreshtha, Anil Kumar Singh

Proceedings of the 12th international workshop on semantic evaluation, 2018

IIT (BHU) submission for the ACL shared task on named entity recognition on code-switched data Shashwat Trivedi, Harsh Rangwani, Anil Kumar Singh

Proceedings of the Third Workshop on Computational Approaches to Linguistic Code-Switching, 2018

Experience __

Amazon.com (Outbound Marketing Automation)

Bengaluru, India

SOFTWARE DEVELOPMENT INTERNSHIP (TECHNOLOGIES - JAVA, SPRING, AND EASYMOCK)

May 2018 - July 2018

- Created a design wiki for a data component for fetching product data from Amazon API considering issues like caching, coupling and ease of usage. The data component will be a part of low latency Notification Data Retrieval Service.
- On boarded the notification program for Sneak Peek Deals Prime Day 2018 through existing packages along with end to end testing.
 On basis of my performance I recieved a Pre Placement Offer.

Training and Placement Cell

IIT BHU Varanasi

 $\textit{Lead Portal Developer and Coordinator (Technologies - Django, Python, HTML and JavaScript)} \ | \ \underline{\textbf{Site}}$

August. 2017 - Present

- Designed and Implemented the automated scheduling system of slots for campus placements based on student preferences.
- Added support for Caching (Memcache + FileBased), Logging and Concurrent usage from backend and frontend. The portal has more then 2500 active users.

Projects -

Named Entity Recognition on English Spanish Code Switched Tweets

NLP Lab, IIT BHU

AMAZON PRIZE FOR BEST SYSTEM (STATE OF ART) AT CALCS@ACL2018 | Publication | Result

Spring 2018

- Proposed usage of alignment of English twitter embeddings and Spanish Fasttext embeddings along with a gated neural architecture.
- Proposed a novel method of ensembling neural outputs from different activation functions. (2% increase in F1)
- An extended version of this with interpretebility comparison with BiLSTM CRF is under submission.

Irony Detection System NLP Lab, IIT BHU

SYSTEM ACCEPTED AT SEMEVAL@NAACL2018 | PUBLICATION | RESULT

Fall 2017

- Build a system by combining linguistic features based on Senti Lexicon and activations from Pretrained CNN (DeepMoji).
- Proposed SMOTE for oversampling neural activations which led to increase of 4% F1 on the imbalanced subtask (Type Of Irony).
- Conducted ablation test for analysis. System outperformed baseline by 5% F1 and stood 4th among 33 teams worldwide.

Honors & Awards _____

COMPETITIVE PROGRAMMING

2016	Honourable Mention, ACM ICPC India Regionals	Amritapuri, India
2016	June Long Challenge, Ranked 51st among 7937 participants in India	CodeChef
2016	Regular Participant in Sophomore Year , rangwani_harsh (Codeforces), lastoption (Codechef)	IIT BHU Varanasi
2016	and rangwani_harsh(Hackerrank).	India

NATIONAL

2021	Qualcomm Innovation Fellowship, Finalist	India
2019	Prime Minister Research Fellowship , PhD student fellowship.	India
2015	JEE Advanced, Ranked 877 out of 1.5 lakh students in India	India
2015	JEE Main , Ranked 161 out of 15 lakh students in India	India
2014	KVPY, Ranked 412 in India and received scholarship.	India
2013	National Talent Search Examination, Scholarship Recipient	India

Skills _____

Programming Python, C/C++, JAVA, SQL, LaTeX, JavaScript, HTML

Frameworks PyTorch, ScikitLearn, Django, Flask, Spring, Keras, NLTK, TestNG, Gensim, Materialize CSS

Activities _____

Reviewer , for CVPR 2022 and Patter Recognition. (Subreviewer for ICLR, ICML, NeurIPS)	IISc
Teaching Assistance , for Deep Learning for Computer Vision and Artifical Intelligence	IISc and IIT BHU
Machine Learning Reading Group , Active participant and organizer of group meetings.	NLP Lab, IIT BHU
Oral Presentation at ACI 2019 Presented our work at CALCS workshop at ACI 2019	Melbourne,
Tat Fresentation at ACL2016, Fresented our work at CALCS workshop at ACL2016	Australia
Coordinator , Preparing the problem statement and organizing Linguipedia (NLP Event).	Codefest
Co-coordinator , Organizing the Byte The Bits Event a collection of Computer Science.	Technex
BasketBall Player, Participated in District Level Competition among schools.	Ajmer
	Teaching Assistance, for Deep Learning for Computer Vision and Artifical Intelligence Machine Learning Reading Group, Active participant and organizer of group meetings. Oral Presentation at ACL2018, Presented our work at CALCS workshop at ACL2018 Coordinator, Preparing the problem statement and organizing Linguipedia (NLP Event). Co-coordinator, Organizing the Byte The Bits Event a collection of Computer Science.