Harsh **Rangwani**

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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*

Lead Portal Developer and Coordinator (Technologies - Django, Python, HTML and JavaScript) | 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.

Development and Course Projects

2019	**Bottom Up and Top Down Attention for Captioning (Notebook Tutorial) (Code|Blog)**,	*Vision and ML*
2019	**Restricted Boltzman Machine for Classification (Code)**, Pytorch implementation in Numpy style (manual grads) for classification with generative, classification and discriminative objective.	*Vision and ML*
2019	**Time Series Modeling On Aviation Data (Code)**, Proposed a novel architecture with transformer as encoder and RNN decoder. The model produced better results then existing approaches.	*Vision and ML*
2017	**Paint It Out (Code)**, A unity based game based on combination of Divide And Conquer and greedy strategy.	*Code.Fun.Do, Microsoft*
2016	**Departmental Website (Code)**, A django and materialize CSS based site prototype with email sender using SMTPLib.	*Course Project*
2016	**Sentiment Analysis (Code)**, Analysis of Generative and Discriminative Models for text classification on the Twenty News Group Dataset.	*NLP Project*

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) and rangwani_harsh(Hackerrank).	*IIT BHU Varanasi 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 |

Extra Curricular Activities

2018	**Machine Learning Reading Group**, Active participant and organizer of group meetings.	*NLP Lab, IIT BHU*
2018	**Oral Presentation at ACL2018**, Presented our work at CALCS workshop at ACL2018	*Melbourne, Australia*
2018	**Coordinator**, Preparing the problem statement and organizing Linguipedia (NLP Event).	*Codefest*
2017	**Co-coordinator**, Organizing the Byte The Bits Event a collection of Computer Science.	*Technex*
2013	**BasketBall Player**, Participated in District Level Competition among schools.	*Ajmer*