Harsh **Rangwani**

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Education

Indian Institute Of Technology (BHU) Varanasi   *Varanasi, India*

B.Tech. in Computer Science and Engineering   *July. 2015 - May 2019 (Expected)*

- Department Rank 2 in Sophomore year with AP (Exceptional Performance) Grade in Artificial Intelligence.
- Cumulative Performance Index (GPA): 9.46/10

St. Stpehens Sr. Sec. School Ajmer   *Ajmer, India*

High School   *July. 2013 - May 2015*

- Awarded the running shield for best student in the senior most class.
- Percentage (All India Senior Secondary School Examination) : 97%

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.
- Implemented the data component in Java along with Integration and Unit tests. The component was prepared for load testing.
- On boarded the notification program for Sneek Peek Deals Prime Day 2018 through existing packages along with end to end testing.
- Onboarding was done in generic way to support any such programs in future. Program launched successfully in US and Japan.

Training and Placement Cell (Working Voluntarily)   *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.
- Mentored a group of junior students for building automatic resume generator and verification system for facts in resume.
- Added support for Caching (Memcache + FileBased) and Logging. The portal has more then 2500 active users.
- Helped companies conduct placement drives and hackathons in campus smoothly.

Department Of Computer Science   *Varanasi, India*

Teaching Assistant for C Programming Course (CSO-101)   *January 2018 - May 2018*

- Responsible for marking and assisting students in the tutorial sessions.

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)
- Our system outperformed the baseline by 10% F1 and the publication got 5/5 review scores from 3 independent reviewers.

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.

Tourism Domain QA System   *Prof. R. Sangal and Prof. A.K. Singh*

Best Poster Runner Up At Institute Annual Day 2018   *Summer 2017*

- Created a dependency based knowledge graph of WikiPedia data. Enriched the graph with Stanford NER and DbPedia annotations.
- Implemented a tree matching algorithm to match question queries to answer sentences using WordNet similarity.

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

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*

Development and Course Projects

2017	**Student Portal (Code)**, A raw SQL query based site. Hosted it on pythonanywhere.	*DBMS Project*
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*
2016	**AnaMover (Remote Controlled Robot)**, Implemented and modified an algorithm to convert the analog signals to machine signals using PWM(Pulse Wave Modulation) in C language for Arduino.	*Technex*

Skills

Programming	Python, C/C++, JAVA, SQL, LaTeX, JavaScript, HTML
Frameworks	Django, Flask, Spring, Keras, PyTorch, ScikitLearn, NLTK, TestNG, Gensim, Materialize CSS
Languages	English, Hindi, Sindhi and Rajasthani (Speaking Proficiency)

Coursework

- Software Engineering
- Data Structures
- Algorithms
- Probability and Statistics
- Artificial Intelligence
- Computer Vision
- Operating System
- Introduction to NLP
- Calculus
- Linear Algebra
- C Programming
- I.T. Workshop

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*
2014	**Attendee**, Attended the National Science Camp Vijyoshi. Trip was sponsored by Govt. Of. India	*IISER Kolkata*
2012	**Dramatics**, Active participant in Dramatics and Cultural Events	*St.Stephens Sr. Sec. School*
2013	**BasketBall Player**, Participated in District Level Competition among schools.	*Ajmer*