

Tushar Shandhilya

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EDUCATION

Year	Degree/Certificate	Institute	CPI/%
2019-Present	MS-R/Computer Science & Engg.	Indian Institute of Technology, Kanpur	9/10
2014-18	B.Tech/Computer Engg.	Aligarh Muslim University(Z.H.C.E.T)	8.62/10
2012-13	CBSE(XII)	Tuli Public School, Nagpur	82.8%
2010-11	CBSE(X)	Tuli Public School, Nagpur	9.4/10

PUBLICATIONS

- Tushar Shandhilya , Nisheeth Srivastava. Using conceptual incongruity as a basis for making recommendations. *14th ACM Conference on Recommender Systems(RecSys)*, Rio de Janeiro, Brazil, 2020
- Neil S, Sagnik M ,Tushar Shandhilya , Ananta M, Ashutosh M . Classification for lexical complexity regression task. *The 15th International Workshop on Semantic Evaluation (co-located with ACL-IJCNLP 2021)*, Bangkok, Thailand, 2021

INTERNSHIP

- **MILE LAB, IISc Bangalore** (Jun'17 - Aug'17)
 - Worked on Document image super-resolution, improved the quality of low resolution document using GANs.
 - Worked on converting the code of PhotoOCR from python to java using Deeplearning4J library.

PROJECTS

- **Improving Recommendations using Conceptual Incongruity**- Thesis, Guide : Prof. Nisheeth Srivastava (Jan'20-present)
 - Working on using **conceptual Incongruity** to improve recommendations for users.
 - Building a system using HSMM to model the sensitivity and boredom of the user.
The work is accepted in **RecSys'20** [1]
- **Malware Analysis and Intrusion Detection**, (CS 698M) Guide : Prof. Sandeep Shukla (Jan'20-Apr'20)
 - Extracted features from raw data using static, Dynamic analysis concepts. Selected feature using tf-idf , missing values, correlated features, unique value features.
 - Trained different Machine Learning models namely Support Vector Machine (SVM), Logistic Regression (LR), Random Forest (RF) and Decision Trees (DT).
 - The evaluation metrics was accuracy and Random Forest outperformed all models.
- **DeCAPTCHA**, (CS771) Guide : Prof. Purushottam Kar (Sep'19-Dec'19)
 - Built a system to pre-process the Obfuscated Captcha images to extract the characters present in the image.
 - Trained a Convolutional Neural network to classify the characters, combining which we get the characters in captcha.
- **Text to Image Synthesis using GANs**, Undergraduate Project Guide : Prof. Asad Khan (Aug'17-May'18)
 - Worked on using Generative Adversarial Networks(GANs) to generate images from the detailed description of text.
 - Trained the model on Oxford-102 Flowers dataset to generate photo realistic images of flowers using Tensorflow.
- **Dependency Parser for Hindi, Marathi**(CS698O) Guide : Prof. Ashutosh Modi (Jan'20-Apr'20)
 - Built a dependency parser for Hindi with a web-interface which outputs a dependency tree for a hindi sentence.
 - Applied and tested transition-based parser which uses SVM as a classifier, neural network based parsers which incorporate context-based word embeddings.
- **IMDBSearcher**, (Internship Project) (Apr'20-Jun'20)
 - Built a Webapp to search for a movie present in IMDB website using title name (Partial or full). Frontend of the webapp is build on Javascript, HTML and CSS.
 - Set up an AWS server on EC2 instance, configured apache2, DNS and mapped it with the web server using Elastic IP, configured services through virtual hosting.

POSITIONS OF RESPONSIBILITY

- **Department Placement Coordinator** Computer Science and Engineering (Aug'20-Present)
- **Teaching Assistant** : Introduction to Programming, Statistical Natural Language Processing (Jan'20-Apr'20)

ACHIEVEMENTS & EXTRA-CURRICULAR

- Secured **All India Rank 498** in GATE CS 2019, about 1 lakh candidates appeared for the examination.
- **Student Volunteer** for RecSys'20. Helped in Managing and organising the online proceedings of the Conference.
- **Honorable Mentions** in ACM-ICPC 2016 (Amritapuri) regionals in a team of 3 members named RubiksCube.
- **Coordinator** in Programmers Forum AMU(Z.H.C.E.T). Managed a team, Organised and delivered lectures on many topics.
- **First Position** in Business Plan Competition organised by Entrepreneurship cell AMU(Z.H.C.E.T) among 50 teams.
- IISc summer school 2016 attendee.