Vasant Kumar Yadav

Third Year Undergraduate
Department of Civil Engineering

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Minor in Machine Learning and applications
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Educational Qualifications

Year	Degree/Certificate	Institute	Performance
2015-present	B. Tech, Civil Engineering	Indian Institute of Technology, Kanpur	8.1/10
2015	Grade 12th (RBSE)	SBN SEC SCH, CCS NAGAR, SIKAR	88.60%
2013	Grade 10th (RBSE)	SBN SEC SCH, SHAHPURA, JAIPUR	92.33%

Scholastic Achievements

- Achieved an **All India Rank** of **6952** among **1.5 lakh candidates** in the **JEE Advanced** 2015
- Achieved an **All India Rank** of 11417 among **13.5 lakh candidates** in the **JEE-Mains** 2015

Machine Learning Projects

Machine Comprehension using SQUAD *(prof. – Harish Karnick)*

- Developed multi layered co-attention Natural Language Processing model to get the answer for given question from a given comprehension
- Trained the developed model on Stanford SQUAD dataset that consists 87000 question paragraph pairs
- Generated word embeddings for given dataset and trained the model using LSTM and Tensorflow

Sentiment Analysis on IMDB Data*(prof. – Harish Karnick)*

- Created Binary Bag of Word, Term Frequency, Paragraph Vector and Word2vec representations on IMDB dataset
- Used Classification algorithms such as Feed forward Neural Network, Naïve bayes, Logistic regression, Support Vector Machine on all four representations
- Achieved 88.34% accuracy on Avg Word to vector representation using multilayer feed forward neural networks

Dependency Parser using Feed forward neural Network *(prof. – Harish Karnick)*

- Developed NLP model to get the dependency parse tree of a given sentence using feed forward neural Network
- Trained the developed model on English Word TreeBank(EWT) that consist 16,622 parsed sentences
- Achieved an accuracy of 90.8% to predict the move in order to generate the parse tree

Academic Projects

Finite Element Method using MATLAB *(prof.- Suparno Mukhopadhyay)* *May'17-Jul'17*

- Developed a generalized MATLAB programme to solve truss of any length using Finite Element Method
- Programmed in MATLAB to solve generalized trusses with supports inclined at any angle
- Designed a MATLAB programme to get Influence Line Diagram of any bar in truss
- Optimization of a truss structure using genetic algorithm in MATLAB

Automated Punch Machine *(prof.- Shashank Shekhar)* *Jan'17 - Apr'17*

- Proposed the idea of the prototype and modelled its design and working using **SolidWorks**
- Coordinated with 5 member team and made the manufactured product to TA's and Instructor

Positions of Responsibility

Senior Executive Media and Publicity, Techkriti'17 *Aug'16 - Mar'17*

- Being in Media and Publicity team, hence performed various tasks for publicizing the fest
- Called Media companies for sponsorship and compiled MOU's for them to publicize events held in Techkriti'17
- Finalized the deal with 7 media sponsors for publicizing the fest, Techkriti'17
- Led four junior executives during the fest for securing proper publicity of sponsors

Technical Skills

Programming Languages – C, Python, MATLAB
Software –MATLAB, SolidWorks ,AutoCad, Adobe Premiere Pro
Others –Git & Github, HTML5/CSS3, MS Word, MS Excel

Relevant Courses

*Indicates in progress

Fundamental of computing
Intro to Natural Language Processing
Intro to Machine Learning*
Data Structures and Algorithms
Applied Probability and Statistics

Extra-Curricular Activities

- Represented hall in DesCon, an event in intra-hall technical competition in Takneek'15
- Part of the Finance Team as Junior Executive in Antaragni 2015
- Certified as a bonafide cadet of 2 U.P. Compo(Tech.) Regt(NCC)

Interests and Hobbies

- Understanding Natural Language Processing Models and Data Structures and Algorithms
- Reading on quora and reading books
- Playing outdoor games, specially Cricket and Badminton