Himadri Mishra

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Education

IIT(BHU), Varanasi India • IDD, Bachelor and Master of Technology in Computer Science and Engg., 2018
Cumulative GPA: 9.28/10.00

> **Relevant Coursework** Artificial Intelligence · Natural Language Processing · Data Structures · Theory of Computation · Computer Networks · Operating Systems · Algorithms · Information Security · Network Security · Machine Vision

Skills

Programming Languages Python · C++ · C · C# · JavaScript
Frameworks Tensorflow · Theano · Keras · Microsoft Bot Framework · Django · Git · LaTeX · Mujoco · SK-Learn

Experience

University of California, Berkeley (Berkeley, CA)
Undergraduate Research Internship under Prof. Dawn Song (Summer 2017)
- Targeted the problem of using Neural Programmer Interpreter for Robotics task, developing on top of the concept of recursion in Neural Programmer Interpreter.
- Tackled the Block stacking problem using a deterministic environment, defining high level primitive actions.
- Developed the Block stacking environment of a Fetch Robot using a physics engine, Mujoco.
- Designed the stacking problem so as to generalize across a varying initial state, configuration and across different number of blocks.

Microsoft India (R&D) (Hyderabad, India)
Software Developer Intern (Summer 2016)
- Designed and Developed a context sensitive chatbot for serving custom queries seeking information.
- Designed a Web Application for chatbot with custom front-end for integration in native Windows Apps, thus increasing the potential reach of the Chatbot.
- Published the bot on Skype and Telegram besides the custom Web Application.

IIT(BHU), Varanasi (Varanasi, India)
Teaching Assistant - DBMS (Spring 2017 - current)
Teaching Assistant - Artificial Intelligence (Fall 2016)
Teaching Assistant - Introduction to Computer Programming (Spring 2015)
- Instructed students lab each week by designing Lab programming experiments, leading discussion, demonstrating procedures and grading students lab report.
- Provided Individual support to students inside and outside the lab for all three of above courses.

Projects

One-Shot Learning using Memory-Augmented Neural Network (IIT(BHU), Varanasi)
Prof. K.K.Shukla (Dec 2016-Jan 2017)
- Performed experiments for few-shots classification on Omniglot dataset using Memory-Augmented Neural Networks and explored the possibility to extend the concept to generic datasets.
- Implemented novel Memory-Augmented Neural Network library in Tensorflow and made available publicly. The repository has 100+ stars and 35+ forks.

Botnet Detection in Computer Networks using Machine Learning (IIT(BHU), Varanasi)
Prof. K.K.Shukla (Jul 2016-Nov 2016)
- Implemented a scalable flow generator based above SFrames, available online on github.
- Extracted useful Network flow based features from the raw Packet capture files and also created additional ones based on network domain knowledge.
- Trained state of the art models, Feed forward Neural Networks and Ensembles and reported the best model performing best on test set.

Movie Retrieval System (IIT(BHU), Varanasi)
Prof. K.K.Shukla (Jan 2016-Apr 2016)
- Built a movie retrieval system using IMDB dataset and Bing Search query for the month of Dec 2015.
- First step was to assign the search queries a relevance score for each corresponding possible result, which was done using the help of 15 people.
- Developed a two step pipeline involving Top-20 retrieval from the Index and finally Re-Ranking them to get the final results.

Achievements and Recognition

- Top 8% in world in Kaggle Allstate Claims Severity contest 2017, securing 242 rank out of 3055 participants.
- Honorary mention in ACM ICPC Amritapuri 17 Asia regional round.
- Honorable Mention in HP Think-A-Thon 2016.
- Switched major from Civil Engineering to Computer Science and Engineering at the end of freshman year by standing out as the topper among all Integrated Dual Degree course students.
- Currently Ranked 2 in the Department.

Miscellaneous

- Coordinator, A-Maze-D, Autonomous grid solver robot event, Technex'16, the annual Techno-Management fest of IIT(BHU).
- Coordinator, Perplexed, Constrained Programming event, Codefest'16, the annual fest of Department of Computer Science and Engg., IIT(BHU)'
- Co-Coordinator, GridXplorer, Autonomous grid solver robot event, Technex'15, the annual Techno-Management fest of IIT(BHU).
- Co-Coordinator of Publicity, Spardha'15, the annual sports festival of IIT(BHU).
- Panel member, Robotics Club, IIT(BHU) for the period 2015-16.
- Member, Club of Programmers (COPS), IIT(BHU).