Poonam Thapar | CS15M034
Indian Institute of Technology Madras

Placement RegNo: 33/CS/17/034

Education

Program	Institution	%/CGPA	Completion
M.Tech, Computer Science	Indian Institute of Technology, Madras	**8.2**	2017
B.E., Computer Science	Army Institute of Technology, Pune	**68.03%**	2013
XII (CBSE)	Kendriya Vidyalaya, Jaipur	**86.2%**	2008
X (CBSE)	Kendriya Vidyalaya, Panchmarhi	**86.6%**	2006

Professional Experience

Belzabar Software Design India (Computer Scientist) *June 2013 - May2014*

- Managed the flagship project of optimising two metasearch engines **Ixquick** and **Startpage**.
- Developed a model to find experts using photoshop usage data.
- Deployed various versions and functionalities of both metasearch engines using Perl. Created parsers required for different search engines.
- Deployed time critical client requests for service optimisation. Performed extensive manual testing for both browser and app versions.
- Appraised as the *best performing* employee for the year 2013 - 14.

Key Projects

Analysis of Mouse Visual Cortical Responses using Machine Learning techniques. (*M. Tech. Project*) *June 2016 - Present*

- Employed Convolutional Neural Network model processed on mouse cortical response data obtained from MIT to classify the neural responses to the stimuli.
- Implementing a regression model that can be used to predict the neuronal responses for the seen data and extend the model for unseen data.

Actions and Word Utterances Recognition using Hidden Markov Model (*Pattern Recognition*) *October - December 2015*

- Employed Hidden Markov Model to classify various actions in different videos recorded in varying environments.
- Used the sequential information in the characters and utterances of words by different speakers for their classification using Hidden Markov Model.

Graph classification using frequent subgraph mining (*Data Mining*) *March - May 2016*

- Classified the graphs in AIDS dataset using their frequent subgraphs as features. Analysed the performance of different subgraph mining algorithms like gSpan, FSG and Gaston.
- Implemented an algorithm to construct the canonical labels of a graph, using which we could also solve the problem of graph isomorphism.

Position of Responsibility

- Teaching Assistant, Pattern Recognition course at IIT Madras, (August - November, 2016)
- Chief Secretary, Training & Placement committee at AIT Pune (2012 - 13).
- Spiritual Secretary, student council at AIT, Pune (2012 - 13).

Key Courses

- Advanced Data Structures & Algorithms
- Kernel Methods for Pattern Analysis
- Probability and Computing
- Pattern Recognition
- Linear Algebra and Random Processes
- Data Mining

Skills

- **Tools and Libraries** - TensorFlow, MATLAB, LaTex
- **Languages**: *Proficient*- Java, C *Intermediate*- Perl, C++, JavaScript, PHP, HTML, CSS, C#

Scholastic Achievements

- Secured All India Rank 184 among 2.2 lakh applicants in GATE 2014.
- Bronze Medalist in B.E. University examinations.
- Recipient of merit scholarships for F.E., T.E., B.E., 10^{th} & 12^{th}.