

Poonam Thapar | CS15M034

Indian Institute of Technology Madras

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Education

Program	Institution	%/CGPA	Year of Completion
M.Tech. (Computer Science and Engg.)	Indian Institute of Technology Madras	8.2	2017
B.E. (Computer Science and Engg.)	Army Institute of Technology, Pune	68.03	2013
XII - CBSE	Kendriya Vidyalaya No. 4 Jaipur	86.20	2008
X - CBSE	Kendriya Vidyalaya Panchmarhi	86.60	2006

Work Experience

Computer Scientist

June 2013 - May 2014

Belzabar Software Design India

- Managed the flagship project of optimising two metasearch engines **Ixquick** and **Startpage**.
- 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.
- Worked on UI designing of the New York City Comptroller's website.
- Appraised as the *best performing* employee for the year 2013 - 14.

Key Projects

1. Analysis of Mouse Visual Cortical Responses using Machine Learning techniques. June 2016 - Present

M.Tech. Project

IIT Madras

- 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.
- Working on identifying the location of the origin of neuronal responses.

2. Let's Board

January - May 2013

B.E. Project

AIT Pune

- Worked on a project sponsored by Persistent Solutions Ltd. to develop a software to assist the company with the management of their employees going abroad.
- Developed an automated system to validate and verify the employee's data and generate the required documents to work abroad.
- Implemented user interface using HTML & CSS, Used Javascript, AJAX and C# for interaction between user & system.

Course Projects

1. Actions and Word Utterances Recognition using Hidden Markov Model

October - December 2015

Pattern Recognition

IIT Madras

- 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.

2. Graph classification using frequent subgraph mining

Data Mining

March - May 2016

IIT Madras

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

Scholastic Achievements

- Secured All India Rank 184 among 2.2 lakh applicants in GATE 2014.
- Bronze Medalist in B.E. University examinations.
- Regional topper in Class 10th CBSE Board Examinations.
- Recipient of merit scholarships for F.E., T.E., B.E., 10th & 12th.

Course Work

- **Machine Learning:** Pattern Recognition, Kernel Methods for Pattern Analysis, Data Mining
- **Computer Science:** Advanced Data Structures and Algorithms, Theory and Applications of Ontology, Digital System Testing and Testable Design
- **Mathematics:** Linear Algebra and Random Processes, Probability and Computing

Technical Skills

- **Languages:** *Proficient-* Java, C, MATLAB, LaTeX *Intermediate-* Perl, C++, JavaScript, HTML, CSS, TensorFlow, Torch

Positions 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 (2011 - 12).

Extra - Curricular Activities

1. Organising and Conducting Events

- Led the entire branch of Computer Science in various events, winning the cultural trophy at college fest (2011).
- Organised feast for 3000+ people and various events at different festivals (2011 - 12).
- Organised NAAC visit at college as an active member of the team (2010).
- Organised tree plantation, blood donation camps and visits to orphanage as NSS member in Pune (2009 - 2012).

2. Sports and Cultural

- 1st position in inter and intra college streetplay (2009, '10, '11).
- Performed Bharatnatyam at various stages in school & college.
- 2nd position in college folk dance (2009, '10).
- Silver medalist in Panchmarhi city marathon of 6.5 kms. (2007)

Objective

To be part of and lead a team tackling challenges that offer constant learning and ample scope for quality contribution towards innovative products.

Declaration

I hereby declare that all the information given above is true to the best of my knowledge as on September 5th, 2016.