HIMANSHU TOLANI

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ACADEMIC DETA	ILS	
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Year	Degree/Exam	Institute	CGPA/%
2014-present	B.Tech in Computer Science & Engineering	Indian Institute of Technology Ropar	8.26/10
2013	CBSE	Mahatma Hansraj Modern School	92.4%
2011	ICSE	Christ The King Ćollege	91.2%

TECHNICAL SKILLS

- Languages: C, C++, Java, Python, Perl, PHP, MySQL.
- Tools: Eclipse, LaTeX, MATLAB.
- Designing Tools and Softwares: HTML, CSS, Javascript, Android Studio, OpenCv.

INTERNSHIPS

Business Card Management Application (Webstaff Co Ltd)

May'17-July'17

Tokyo (Japan)

o Built an Android and Web Application for Business Card Management.

- Objective was to perform the OCR on Japanese business and segregate all the information.
- o Built an Android and Web Application with extra features like Company Tree, Location, Calling, Memo, Tag etc.

• RNA Logistics Jun'16-July'16

- Built Android application for an upcoming startup working basically on driver ends application.
- Used Google Maps api for navigation purposes through GPS and also worked on data received from the server.

PROJECTS

• Goal Stack Planning (Guide: Dr. C.K Narayanan)

Mar'17

- Solved the block world problem using Forward Progression and Goal Stack Planning .
- A detailed analysis was done over test cases on Forward Progression using BFS and Astar with Goal Stack Planning.
- **Image Morphing** (Guide: Dr. Puneet Goyal)

Oct'16

- Used delauney triangulation method to morph two images.
- o A very smooth transition were observed when projected in GIF format .
- K-means clustering and Dimensionality Reduction (Guide: Dr. C.K Narayanan)

Oct'16

- Used K-means clustering to classify the digits of the Hand written MNIST dataset.
- Later used Principal Component Analysis to reduce the dimensions and achieve similar results.
- Naive Bayes Classifier (Guide: Dr. C.K Narayanan)

Sep'16

- Used Naive Based Classifer to predict whether a given email is spam or not .
- The predictions were 90% correct.
- **Decision Trees and Forest** (Guide: Dr. C.K Narayanan)

Aug'16

- Implemented ID3 decision tree algorithm on the Insurance Company Benchmark Dataset and got an accuracy of 90%.
- o Also implemented the post pruning strategy on the Decision Tree to improve the efficiency to 92%.
- Further improved the performance to 93.5% using ensembles and feature bagging concept.
- Mathematical Simulators (Guide: Dr. C.K Narayanan)

May'16-July'16

- Built Mathematical simulators for processes like Gradient Descent, Singular Value Decomposition and Lagrange Multiplier and depicting the geometric interpretation.
- o Tools used for creating the simulators were Math.js, chart.js, Plotly.js, Numeric.js.

SCHOLASTIC ACHIEVEMENTS/ EXTRA CURRICULAR ACTIVITIES

- Recognized by the Dept. of Science and Technology U.P. for Obtaining Maximum Marks(100/100) in Computer Science ICSE examination.
- Co-ordinator, Coding Club, IIT Ropar.
- Member of Basketball Team and participated in 50th, 51st Inter IIT Sports Meet held at IIT Bombay, IIT Kanpur.
- Member, team "ENACTUS", 2014-2016, worked on projects like CLEANSHIELD and KALPVRIKSH for betterment of society.

RELEVANT COURSES

• Completed Courses: Intro to Computer and Programming, Data Structures, Digital Electronics, Computer Architecture, Discrete Mathematics, System Software Laboratory, Programming and Paradigm, Fuzzy Logic, Analysis and Design of Algorithm, Machine Learning, Operating System, Image Processing, Logic and Computability, Artificial Intelligence, Computer Networks.