Skand Vishwanath Peri

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Indian Institute of Technology, Ropar, India

EDUCATION B. Tech in Computer Science and Engineering,

2014 - 2018 Expected

Indian Institute of Technology, Ropar, India

PROJECTS

Detecting Distracted Vehicle Drivers

Present

Mentored by Dr C.K.Narayanan, Dept. of Computer Science, IIT Ropar

This project aims to detect if the driver is distracted, with the help of Computer Vision and Convolutional Neural Networks. The training images of this project have been taken from State Farm Insurance Company.

E-Learning with Fuzzy Concepts

Present

Mentored by Dr Puneet Goyal, Dept. of Computer Science, IIT Ropar

This project aims to explore and compare MOOCs platforms, Coursera and edX using Fuzzy Analytic Hierarchy Process (AHP) and provide a criteria to judge between the two platforms.

Mathematical Visual Simulators,

May, 2016 - July, 2016

Mentored by Dr C.K.Narayanan, Dept. of CS, IIT Ropar

Developed a GUI version of Singular Value Decomposition, Gradient Descent and Lagrange Multipliers depicting their geometrical interpretation. Chart.js, Plotly.js, Numeric.js and Algebra.js libraries were used to develop the tool.

Android Application for RNA Logistics, Noida, India

June, 2016 - July, 2016

Built an android application for real time tracking of trucks. Developed the driver end application and used Google Maps API for navigation and worked with JSON to recieve requests from server end.

Database Storage of data received from Sensors

Dec, 2015

Mentored by Dr C.K.Narayanan, Dept. of CS, IIT Ropar

This project aims to receive Data from sensors via Socket Programming and store it in MySQL Database which is further used as a training dataset for machine learning algorithm. This was implemented with the help of Queue data structure and Java Database Connectivity (JDBC) and no loss in data was ensured.

TECHNICAL

Research Interests - Machine Learning, Artificial Intelligence, Neural Networks.

SKILLS

Languages - C, Python, Java, C++, PHP, Perl.

Tools/Frameworks - MySQL, SQLite, OpenGL, OpenCV, Android.

OTHER Projects

1. Finding Quality of Life Index

Feb, 2016

Used Fuzzy Relation Database in order to find the Quality of life index of a city. Various factors that would affect the life index were found and an algorithm in order to consider the fuzziness involved in the factors and compute the index was developed.

2. Domain Specific Language

Mar, 2016

Developed a DSL for Music Domain that simplifies cueing, equalization and audio-mixing, beat-matching, scratching and beat juggling. Developed syntax and grammar for the language and also included few libraries.

3. Text Compression: Used Huffman encoding and decoding in order to compress and decompress text files. Heap based priority queue and hash tables were used and implemented with a compression ratio of about 0.76.

Scores,

1. Current Head of Coding Club, IIT Ropar.

Achieve-

2. CGPA of **7.75**/10 (Jul 2016)

MENTS,

3. City Head of BloodConnect (NGO) from 2015 to 2016 January.

- SCHOLARSHIPS 4. Member of Team Kshitij (Annual Magazine of IIT Ropar) from 2014 to 2015 June.
 - 5. Secured AIR 2084 in IIT JEE 2014 (among the top 0.5% students).
 - 6. Selected for prestigious Kishore Vaiquanik Protsahan Yojana Fellowship (among top 2% of the students).
 - 7. Intermediate/+2 (Board of Intermediate Education, Andhra Pradesh): 96.7 percent.
 - 8. Matriculation (All India Secondary School Examination): CGPA 10/10.