Devendra Pratap Yadav

Sophomore (2nd) Year B.Tech Student
Computer Science and Engineering
Indian Institute of Technology Ropar
Rupnagar, Punjab, India

D.O.B : 20 Dec 1996
Github : DevendraPratapYadav
2014CSB1010@iitrpr.ac.in

ACADEMIC DETAILS

YEAR	DEGREE	INSTITUTE	PERCENTAGE/CPI
2014-Present	B.Tech in Computer Science and Engineering	Indian Institute of Technology Ropar	8.81 / 10.0
2013	XII Grade CISCE- I.S.C.E	Modern Academy, Lucknow	90.2 %
2011	X Grade CBSE- S.S.E	Army School, New Cantt. Allahabad	10.0 / 10.0

ACADEMIC PROJECTS

- **Data Structures based Programs** **Aug-Nov 2015**

  Dr. C.K. Narayanan, IIT Ropar

  Developed programs in Java to implement various Data Structures:
  - Implemented a version of **BigInteger Class** supporting arithmetic operations.
  - Lossless Compression of files using **Huffman Encoding** and Decoding.
  - Balanced Binary tree based **Database** to track transactions of items.
  - **Pattern matching** using Suffix trees with support for Wildcard characters
  - **Flight Trip Planner** : Find quickest route between cities during specified time interval.

- **Software Lab Projects** **Feb 2015**

  Developed several Java based software:
  - **Desktop Chat Application**: Created a socket programming based chat application using Java Swing and AWT for GUI. It uses multithreading for supporting multiple clients at once.
  - **DTO Generator**: Java program using JDBC to connect to SQL database and create a DTO (Data Transfer Object) java files for tables in database.

- **Applications of Fuzzy Logic in Image Processing** **Feb 2016-Present**

  It involves implementation of fuzzy logic in image processing tasks including contrast enhancement, edge detection and pattern recognition. The effect of using fuzzy logic is studied by comparing the results of various techniques.

- **Image Compression using SVD Decomposition** **Feb 2016-Present**
  Involves implementing and analyzing image compression algorithms using SVD Decomposition method in MATLAB. The project is part of Applied Linear Algebra course. The SVD decomposition method has applications in Machine Learning.

- **Economical Internet Controlled Circuit/Appliances** **Nov 2015**
  Dr. Rohit Y. Sharma, IIT Ropar
  This project allowed user to remotely control any appliance/circuit via an Android App over the Internet. It included development of Android App, Web Server (PHP), and interfacing Arduino microcontroller to the internet. We can implement an economic Smart Home solution using the project. **The project won 1st prize (in CSE Department) in Design Exhibition held at IIT Ropar.**

TECHNICAL SKILLS

Programming Languages : Java, C, C++, JavaScript, CSS, Perl, ARM Assembly
Software Packages : MATLAB, MySQL, MS Visual Studio
Platforms : Linux, Windows, Android

RELEVANT COURSES AT IIT ROPAR

Completed: Data Structures, Computer Architecture, Discrete Mathematics, Real Analysis
Ongoing* : Applied Linear Algebra , Programming Paradigms, Fuzzy Logic
*To be completed by May 2016

SCHOLASTIC ACHIEVEMENTS

- **Institute Rank 1** in 3rd Semester (2015) among 120 students with **SGPA: 9.32/10.0.** Awarded Merit Certificate for the same.
- Secured 99.7 percentile JEE-Advanced 2014 (amongst 1.5 million candidates)

EXTRA CURRICULAR ACHIEVEMENTS & ACTIVITIES

- **Competitive Programming :** Actively participate in online programming contests on Codechef, HackerRank etc. and participated in ACM ICPC 2015.
- 1st Position in Tech Quiz at Inter-IIT Tech Meet 2016.
- 1st Position in Intra-College Coding Contest and Programming Quiz at IIT Ropar in 2015.
- Active member of Coding Club at IIT Ropar.