

# Dewang Modi

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Links : • Github • Facebook • LinkedIn

## EDUCATION

### IIT KHARAGPUR

Third Year Undergraduate,  
Computer Science and Engineering  
(B.Tech + M.Tech Dual Degree)  
Expected July 2022 | Kharagpur  
CPGA : 9.81 / 10

### RAMAKRISHNA VIDYA MANDIR

Class 12 (CBSE)  
May 2017 | Gwalior, India  
Aggregate : 93.8%

### THE WOODSTOCK SCHOOL

Class 10 (CBSE)  
May 2015 | Gwalior, India  
CGPA : 10/10

## COURSEWORK

- Operating Systems\*\*
- Computer Networks\*\*
- Machine Learning\*
- Database Management Systems\*\*
- Compilers"
- Computer Organization and Architecture"
- Algorithmic Game Theory
- Linear Algebra
- Algorithms-2
- Probability and Statistics
- Software Engineering"
- Switching Circuits and Logic Design"
- Formal Language and Automata Theory
- Discrete Structures
- Algorithms"
- Signals and Networks"
- Introduction to Electronics"
- Programming and Data Structures"
- Machine Learning(Coursera)

\* denotes ongoing courses

" have laboratory components as well

## SKILLS

• C • C++ • Python • Java • HTML • CSS • Git  
• MySQL • Verilog • Flex • Bison

Familiar with Python Libraries

• Numpy • Pandas • Matplotlib • Scikit-learn  
• Keras • Flask • BeautifulSoup • Selenium  
• OpenCV

Familiar with AWS Sagemaker, Google Colab

## EXPERIENCES

### TINYC COMPILER | COMPILERS TERM PROJECT

July 2019 - November 2019 : Made a compiler for tinyC language(subset of C). The project involved writing lexer and parser using flex and bison.

### PROCESSOR DESIGN | COA TERM PROJECT

October 2019 - November 2019 : Using Verilog, designed and implemented a single-cycle processor on FPGA board for an assembly language similar to MIPS.

### DATA SCIENCE INTERNSHIP | DELHIVERY, GURGAON

May 2019 - July 2019 : Developed an object-detection based system for judging Proof of Delivery documents, along with image processing and heuristics, and set up a complete pipeline for all steps involved in the process. The new model replaced their older technique and performed better in terms of speed and accuracy and the automated system reduced manual work in the process.

### SOFTWARE ENGINEERING PROJECT | TERM PROJECT

March 2019 : Developed Work Management System using Java, which performs tasks such as managing workers and jobs, appropriately scheduling workers to jobs based on location, getting feedback from public and more.

### OPENSOFT | GENERAL CHAMPIONSHIP | INTER HALL | 4th

March 2019 : In this competition, we were required to build a legal search engine for law experts and common people. Queries were of many types and could be keywords based or sentences, and could have different filters.

### DATA ANALYTICS | GENERAL CHAMPIONSHIP | INTER HALL | GOLD

February 2019 : In this competition, we were required to perform data analysis and train machine learning models that use cell tower statistics such as usage, customer count, etc, to predict the type of network congestion that might occur.

### KWOC 2018 | KOSS | OPEN SOURCE

December 2018 : Contributed to open source projects - Artemis Arrow, Easy Learning, Epurifier.

### HACKTOBERFEST 2018 | DIGITAL OCEAN | OPEN SOURCE

October 2018 : Involved contribution in Open Source projects. Made contributions related to Algorithms and Data Structures

### CODE.FUN.DO++ | MICROSOFT | HACKATHON

October 2018 : Made a Web App using Django to provide a single place for victims of natural disasters to make help request, for volunteers to make donations and forums for discussion.

## ACHIEVEMENTS

- Department Rank 2/44 in Computer Science and Engineering with a CGPA 9.81/10.
- Won fourth position in Inter-Hall Opensoft Event on "Building a Search Engine for legal domain" in March 2019
- Won Gold Medal in Inter-Hall Data Analytics Event on "Prediction of Network Congestion in Telecom Towers" in February 2019
- Team ranked 13th in programming contest Overnite at KSHITIJ 2019 in Jan 2019
- Received Medal in Annual NSS Camp, December 2017
- Secured JEE - Advanced Rank 321, amongst nearly 1.7 Lakh candidates.
- Secured JEE - Mains Rank 160 amongst 12 Lakh candidates.
- Secured KVPY Rank 983 amongst nearly 50 thousand candidates.

## EXTRA ACADEMIC ACTIVITIES

- Vice Captain of Data Analytics Team of Patel Hall of Residence(2019- )
- Vice Captain of OpenSoft Team of Patel Hall of Residence(2019- )
- Alumni Committee Member of Patel Hall of Residence(2018-19)
- NSS Volunteer at IIT Kharagpur(2017-2019)