# DIVYANSHU BHARDWAJ

## SOPHOMORE UNDERGRADUATE • MATHEMATICS AND SCIENTIFIC COMPUTING

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#### **EDUCATION**

Indian Institute of Technology Kanpur

Sophomore Undergraduate

Mathematics and Scientific Computing

July 2018 - April 2022[Expected]

Overall CGPA: 9.1/10(Currently)

Kendriya Vidyalaya Dogra Lines Meerut

All India Senior School Certificate Examination

May 2018
Percentage: 96%

Kendriya Vidyalaya Air Force Station Salua

All India Secondary School Examination

May 2016

CGPA: 10/10

## TECHNICAL STRENGTHS

Programming Languages
Web Development

Web Development Utilities C, C++, Python, Java, JavaScript, Ruby, Haskell

HTML, CSS, JavaScript, Django, Ruby on Rails, MySQL, MongoDB

Git, MATLAB, Latex, Android Studio, Bash, Selenium

## PROJECTS AND EXPERIENCE

## Fully Homomorphic Encryption Library

May 2019 - Present

Programming Club IIT Kanpur

- · No efficient algorithm for practical use is available as of now.
- · Part of a team that is working on a library with faster implementation of FHE to make it practical for use.
- · Read and implemented two different algorithms of FHE in C++.
- · Finding new algorithms and optimizing the currently existing algorithms.

Life@IITK

May 2019 - Present

Programming Club IIT Kanpur

https://github.com/life-iitk

- · Created a web and mobile app from scratch which is used by students to keep track of all the events happening in campus of their interest removing the unnecessary spamming of mail which was a big problem.
- · Used Django for backend and React for frontend.
- · Won best project in socially relevant category among projects from various clubs.

## Haskell Scrabble Solver

May 2019 - July 2019

Self Project

qithub://d1vyanshu/Haskell-scrabble-solver

- · Learnt the concepts of functional programming through Haskell, one of the most widely used functional programming languages .
- · Deep dived into the concepts of Type theory, Currying , Recursion, Immutability, File Systems, Pattern Matching and Laziness of Haskell.
- · Made a Scrabble Solver in Haskell (A Two Player version and a Play with Computer version) which used Lexicographical Search, Regex-type functions(written from scratch) and Quick Sorts as the major algorithms

Department of Computer Science and Engineering IIT Kanpur

qithub://d1vyanshu/mymoney

- · Received intensive training on technologies used in full-stack development.
- · Worked in team of five and developed android app which parses messages and keeps record of various expenses and help stop over expenses.
- · Won 2nd prize out of 23 projects.

#### ACADEMIC ACHIEVEMENTS

- 2019 Academic Excellence Award, for exceptional academic performance in freshman year.
- 2018 All India Rank 697, Joint Entrance Examination (Advance) among 200,000 candidates.
- 2018 All India Rank 217, Joint Entrance Examination(Mains) among 1.5 million candidates.
- 2018 KVPY Scholar, Indian Institute Of Science Bangalore, India. (All India Rank 30)
- 2017 Stood in State **Top 1%** in Chemistry and Physics Olympiads organized by IAPT. (Prelims for International Olympiads)

### RELEVANT COURSES

Secretary

Set Theory and Mathematical Logic	
Data Structures and Algorithms	
Calculus and Analytic Geometry	

Linear Algebra Fundamentals of Computing Ordinary Differential Equations

### POSITION OF RESPONSIBILITY

## Programming Club IIT Kanpur

January 2019 - Present *IIT Kanpur* 

Responsible for conducting activities and competitions for campus community and conducting lectures and workshops on different topics.

## Counselling Service IIT Kanpur

Academic Mentor

April 2019 - Present IIT Kanpur

Responsible for providing academic help and support to incoming freshmen. This includes helping them with studies and guiding them to make their transition from school to college fun and stress free.

## Games and Sport Council

Secretary, Web

January 2019 - Present  $IIT\ Kanpur$ 

Responsible for maintaining the council website and suggest plans to increase reach of council online.