

## Academic Details

- 2015–2019 **Bachelor Of Technology In Computer Science Engineering**,  
*Indian Institute of Technology Delhi, CPI – 8.588.*
- 2015 **CBSE AISSCE**, *Hope Hall Foundation School, Delhi, Percentage – 95.8%.*
- 2013 **CBSE AISSE**, *Jawahar Navodaya Vidyalaya, Assam, CPI – 10.*

## Relevant Courses

- Computer Science Data Structures and Algorithms, Discrete Mathematics, Digital Logic and System Design, Introduction to Computer Science, Programming Languages\*, Computer Architecture\*, Design Practices\*.
- Mathematics Probability and Stochastic Processes, Calculus, Linear Algebra and Differential Equations.
- Electrical Introduction To Electrical Engineering, Signals & Systems\*.
- Online Introduction to Computer Networking(Stanford), Parallel Programming(EPFL), CS50(Harvard).

\*Courses to be done by summer 2017.

## Course Projects

- September - present **Search Engine by Inverted Search Index**, Under Prof. Amitabha Bagchi, CSE, IIT Delhi.  
• Developed a search engine model in Java using Inverted Search Index.  
• Summation of  $1/(\text{square of the indexes})$  where words appeared, was used to calculate relevance.
- August - September, 2016 **Mobile Phone Tracking**, Under Prof. Amitabha Bagchi, CSE, IIT Delhi.  
• Developed a multithreaded model in Java to replicate real life mobile tracking in a area.  
• Analysed the Two-way-Radio system of connection.
- July - August, 2016 **Multithreading Stock Exchange**, Under Prof. Amitabha Bagchi, CSE, IIT Delhi.  
• Implemented a multithreaded model of stock exchange and profit is calculated using 3 different threads.  
• Data from a file was processed but in real time using threads.

## Independent Projects

- May - July, 2016 **Peer-to-peer networking**, Python, Sockets, Link - <https://github.com/swapnil96/P2P-chat>.  
• Created a P2P service where multiple clients log into a central server and eventually connect to other clients.  
• Server authenticates and manages multiple chat sessions.  
• Analysed crowding and high bandwidth consumption in network by connecting 8 systems simultaneously.
- April - May, 2016 **Applications of Brute Force Technique**, Python, Link - <https://github.com/swapnil96/Brute-Force>.  
• Implemented Backtracking algorithm to solve Peg-soltaire, Sudoku solver, Magic-square finder.  
• Measured the limit of brute force on a system of 2.4Ghz Intel i7 quad core processor.

## Technical Skills

- Languages Python, Java, C++, C, VHDL, HTML, CSS3, MySQL, Javascript
- Frameworks Bootstrap, Django, JQuery, Socket, TKinter, Web2Py
- Softwares GIT, Xilinx ISE suite, Autodesk Inventor, Android Studio, Visual Studio, L<sup>A</sup>T<sub>E</sub>X, MS office

## Scholastic Achievements

- 2015 Secured **All India Rank 2666**(category-28) in JEE-Advance, 2015 among **0.15 Million** candidates.
- 2015 Secured **All India Rank 1728**(category-17) in JEE-Main 2015 among **1.4 million** candidates.
- 2015 Awarded Scholarship of Merit by CBSE for being in **top 25 among 1 Million** in AISSCE.
- 2014 Selected as (**KVPY**) scholar under 'Kishore Vaigyanik Protsahan Yojana' given to top 1% conducted by **IISc Bangalore and Govt. of India.**
- 2013 Awarded Scholarship of Merit by CBSE for being in **top 27 among 1.3 Million** in AISSE.

- 2013 Selected as Dakshana scholar for qualifying in GDST conducted by **HRD ministry Govt. of India**.
- 2012 Qualified **Regional Mathematics Olympiad(RMO)** and appeared in **Indian National Mathematics Olympiad(INMO)** conducted by **Homi Bhabha Centre for Science Education(HBCSE)**.

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## Extra Curricular Achievements

### Programming Contest

- Jan 2016 **Microsoft Code.Fun.Do Hakathon** - Runners up. Created a game in Visual Studio using C#
- July 2016 **Microsoft Finalist Forum** - Participated online and completed 1st round.
- April 2016 Qualified Google Code Jam qualifying round.

### Others

- 2013 3rd place in Intra District debate competition.
- 2012 Regional Badminton Player from JNV under Shillong Region.
- 2002 - 2009 Completed a 7 year course in Fine – Arts.

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## Position of Responsibility

- 2016-17 Website executive of eDC team, IIT Delhi.
- 2016-17 Activity Head in TRYST(Annual technical festival) 2017 of IIT Delhi.