

Academic Details

- 2015–2019 **Bachelor Of Technology In Computer Science Engineering**,
Indian Institute of Technology Delhi, CGPA – 8.588.
- 2015 **CBSE AISSCE**, *Hope Hall Foundation School, Delhi, Percentage – 95.8%.*
- 2013 **CBSE AISSE**, *Jawahar Navodaya Vidyalaya, Assam, CGPA – 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 - **Search Engine by Inverted Search Index**, Under Prof. Amitabha Bagchi, CSE, IIT Delhi.
present
 - 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 - **Mobile Phone Tracking**, Under Prof. Amitabha Bagchi, CSE, IIT Delhi.
- September, 2016
 - Developed a multithreaded model in Java to replicate real life mobile tracking in a area.
 - Analysed the Two-way-Radio system of connection.
- July - **Multithreading Stock Exchange**, Under Prof. Amitabha Bagchi, CSE, IIT Delhi.
- August, 2016
 - 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

- October - **Proxy/Server-client model**, Python, Sockets, Threading, <https://github.com/swapnil96/Proxy-Server>.
- November, 2016
 - Created a server-client model where each server acts as a proxy or delivers the files(any type) to the clients.
 - Data is streamed continuously from server through the proxies.
- 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^AT_EX, 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.
- 2012 Qualified **Regional Mathematics Olympiad(RMO)** and appeared in **Indian National Mathematics Olympiad(INMO)** conducted by **Homi Bhabha Centre for Science Education(HBCSE)**.

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.

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.