

Vikram Waradpande

ID: **2015B4A7454P**

PROFILE

I am a second year student at BITS, Pilani and my stream of study Mathematics and Computer Science. I am a mathematics enthusiast and love to solve recreational math problems. I also am a keen programmer. I have an open heart for learning new things and working with new ideas. I have been an active member of the Mathematics website **brilliant.org** and the programming website **hackerrank.com**

PROPOSAL

I would love to work in the field of graph theory. Having already worked in graphs in computer science I learnt the use cases of graphs in real life. I've also implemented various graphs and networks search algorithms in using C/C++ and Java. I've also read some elementary parts of the book "**Graph Theory**" by **Xiong Bin** during my preparation of olympiads like **RMO** and **AMTI**. I've also built programs for graph algorithms like **Dijkstra's algorithm, Post Order/Pre Order Tree Traversal, BFS, DFS**.

A related course I did during the last semester was **Discrete Mathematics** and scored an **A grade** in it. I also plan to take **Neural Networks** course in my next semester because I have interest in Artificial Intelligence and knowledge of graphs would give an edge to my learning the course. Also, this semester I've taken the course **Cryptography** this semester and would like to know applications of graph theory in the same.

I would like to do a Study Oriented Project in the field of Graph theory under your guidance. I think it would be an invaluable learning experience. Apart from studying theoretical concepts of graphs, I feel doing a project would provide a more comprehensive knowledge of the same.

ACADEMIC ACHIEVEMENTS:

CGPA: **9.28**

12th Grade (HSC): **96.3%**

JEE(Main) : **AIR 469**

Qualified first round **A.M.T.I.** olympiad.

Shortlisted for **G.M.O.**

EXPERIENCE

Executive Committee Member - *Mathematics Association*

- Participated in mathematics association activities during the past 3 semesters.

Technical Team for APOGEE - *Mathematics Association*

- Collaborated in development of interface of the events 'Zombie Maths' and 'Join and Win' for APOGEE-2017. My work was primarily with JavaScript and HTML/CSS.

Technical Intern - *Streetbonton*

- Worked as a frontend developer for a startup 'Streetbonton'. I created a website for the same. The website is accessible at www.streetbonton.com

Technical Intern - *Cabme*

- Worked as a frontend developer for a BITSian startup 'Cabme'. I worked with website editing and SEO.

PROGRAMMING SKILLS

C, C++, Java, JavaScript, Python, CSS

Shell Scripting, Git DVCS

OTHER INTERESTS

My other interests include reading books(fiction/non-fiction) and playing guitar. I also like playing games like badminton, cricket and hockey.