

Ayush Agarwal

Third year Undergraduate,
Computer Science and Engineering,
IIT Kanpur.

B-223/10, IIT Kanpur
8090686935
ayushaga@iitk.ac.in

Education

Year	Degree	Institute	CPI
2017(Expected)	B.Tech, Computer Sc.	IIT Kanpur	8.5/10
2013	HSCE	St.Anselm's Sr. Sec. School	89%
2011	AISSE	St.Anselm's Sr. Sec. School	10/10

Achievements

- All India Rank **146** in **JEE**-Advance, 2013.
- **NTSE** and KVPY **Scholar**
- Bronze in **Inter-IIT**(2015) Data Analytics competetion.
- Rank-**1** in International Mathematics Olympiad(IMO) by SOF.
- Among final **35** students selected for **OCSC** Camp for International Physics Olympiad(**IPhO**),2013 .
- Cleared Regional Mathematics Olympiad(**RMO**) and National Standard Examination in Astronomy(**NSEA**).
- Secured AIR-**8** in stage-1 National Science Olympiad(**NSO**) by SOF.
- Secured Rank-**26** in National Science Talent Search Exam (**NSTSE**).
- Secured Rank-**1** in Mathematics Genius Award (State level competition).

Projects

- **Backend Development and Network Establishment**
under Prof. Manindra Agarwal
 - Developed the backend **Models** and **Api** in **scala** using the **Akka** framework for handling http requests, **Argonaut** for marshallng/unmarshallng of json, and **Slick** for dealing with **PostgreSQL** database.
 - Developed a Cookie based **Stateless** Authentication System.
 - Established a cross host overlay network among **Dockers** in a **CoreOS** cluster using **Weave**.
- **Hotel Recommendation System**
 - Developed a hotel recommendation based on the customer reviews. Wrote python scripts using **BeautifulSoup** to crawl customer review data from tripadvisor. Used this data for **LDA** to assign rankings to the hotels.
- **Portal for Academic Mentor System for Counselling Service,IITK**
 - Developed an online portal for better interaction of Counselling Service and academically deficient students. Used **MVC** architecture from a **Codeignitor** (php-framework).
- **Application on Delaunay Triangulation**
 - Renders image using only triangles using Delaunay Triangulation. GUI implemented using tkinter and webcam support. Used OpenCV for image processing and Manipulation.

Relevant Courses

(*)Ongoing Courses

ESC101	Introduction to Prog.	ESC201	Introduction to Electronics
CS210	Data Structure and Algorithms	MSO201	Probability and Statistics
CS201	Discrete Mathematics	CS202	Logic in Computer Science
CS203	Abstract Algebra	CS330*	Operating Systems
CS220	Computer Organisation	CS252*	Computing Lab-II
CS251	Computing Lab-I	CS340*	Theory of Computation
CS345*	Algorithms - II	CS653*	Functional Programming in Haskell

Technical Skills

Languages	Scala, C, C++, Python, Php, Dart Bash Scripting, Verilog
Platforms	Linux, CoreOS, Windows
Tools	Akka, PostgreSQL, Angular, docker, weave, vagrant Git, Sbt, Octave, HTML, SCSS

Position of Responsibility

- **Academic Mentor**, for Counselling Service
- **Web Master**, portals of Counselling Service
- **Secretary**, Animation Club, IITK