Ayush Agarwal

Third year Undergraduate,   B-223/10, IIT Kanpur
Computer Science and Engineering,   8090686935
IIT Kanpur.   *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.

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 marshalling/unmarshalling of json, and **Slick** for dealing with **PostgresSQL** 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).

Relevant Courses

(*)Ongoing Courses

ESC101	Introduction to Prog.	**MSO201**	Probability and Statistics
CS210	Data Structure and Algorithms	**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, PostgresSQL, Angular, docker, weave, vagrant, Git, Sbt, Octave