

Shubham Agrawal

Junior Undergraduate, IIT Kanpur

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Educational Qualifications

Year	Degree/Certificate	Institute	CPI/Percentage
2013-Present	B.Tech, Computer Science and Engineering	Indian Institute of Technology, Kanpur	9.0*/10
2012	Grade 12 th (CBSE)	St. Joseph's Sr. Sec. School, Kota	94.0%
2010	Grade 10 th (CBSE)	St. Joseph's Sr. Sec. School, Kota	10/10

*-C.P.I. till Fourth Semester

Scholastic Achievements

- Secured an All India Rank of **191** in **IIT-JEE ADVANCED 2013** among 1, 50,000 candidates
- Awarded the **Academic Excellence Award** for the academic year 2013-14 by IIT Kanpur for exceptional academic performance
- Secured an All India Rank of **1234** in **JEE-MAINS 2013** among 14, 00,000 candidates
- Qualified the written exam of **Kishore Vigyan Protsahan Yojna (KVPY) 2012-13**
- Among **Top 1%** candidates in Rajasthan state in **National Standard Examination In Physics (NSEP) 2012**

Projects

- Adaptive Question Recommender System** May 2015-July 2015
Summer Internship, Pariksha.co, Knoctowl Technologies Private Limited, Pune
 - Designed a system that analyzes student's capability and serve questions depending upon student's previous performance
 - Modelled and programmed two micro-services using **GO language** and **MongoDB database**:
 - Adaptive Question Recommender Service**: Formulated and analyzed mathematical equations which involved formulae for section specific student and question ratings. Build RESTful JSON API, **Token based Authentication System** and done **Database Sharding** for horizontal scalability
 - Student Practice Section**: Developed API for fetching and storing data from above service and build user interface on top of that API that allow users to attempt questions suited to their performance level
- Facebook Forum App** May 2014-June 2014
Project under Programming Club, IIT Kanpur
 - Created an online **discussion website** for students and connected it with Facebook to make it more user friendly
 - Used PHP and PostgreSQL for back-end and hosted application on Heroku. Used **Facebook SDK for JavaScript** for Facebook login and Canvas frame for user interface. Users can like, comment, share answers and receive notifications
- Baja Student India, IITK Motorsports** December 2013- January 2015
Faculty Advisor: Dr. Avinash Kumar Agarwal, Department of Mechanical Engineering
 - Designed and fabricated an **All-terrain vehicle** for the competition **BAJA STUDENT INDIA 2015**, an Engineering design competition
 - Secured **fourth position** out of forty-four teams in design competition and won **BEST ROOKIE TEAM** trophy in the event
- Other**
 - Installed and integrated **DOMjudge** (open source online judge) during summer internship at Pariksha.co May 2015-July 2015
 - Created a notification service prototype using **ws websocket node.js library** during summer internship at Pariksha.co May 2015-July 2015

Technical Skills

- Programming Languages**: C, C++, LaTeX, Verilog, Assembly
- Web Development**: Golang, PHP, MongoDB, MySQL, PostgreSQL, AngularJS, Node.js, HTML, CSS, JAVASCRIPT
- Frameworks**: CakePHP, Revel
- Platforms/Tools**: FB Graph API, Git, Jmeter, Gnuplot, Octave, SolidWorks, ANSYS

Relevant Courses

- Computer Science**: Data Structures and Algorithms, Fundamentals of Computing, Computer Organization, Computing Laboratory-I, Operating Systems*, Algorithms-II*, Computing Laboratory-II*
- Mathematics**: Linear Algebra, Discrete Mathematics, Abstract Algebra, Probability and Statistics, Logic, Theory of Computation*
- Others**: Introduction to Electronics

*-Ongoing

Position of Responsibilities

- Academic Mentor, Counselling Service IITK**: Provided academic assistance to junior students by organizing hostel level classes
- Chassis Manufacturing Head, Baja Student India, IITK Motorsports**: Managed team of 20 student members to build the chassis sub-system of the vehicle. Contacted dealers for tubes, workers for welding, notching and supervised whole manufacturing process

Extra Curricular

- Participated in the event **HOVERRUGBY** in an intra-hall technical festival, **TAKNEEK 2013**
- Volunteer in **blood donation camp** organized by RAKTARPAN team, IIT Kanpur