Ayush Tulsyan

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EDUCATIONAL QUALIFICATIONS

Year	Degree	Institution	CPI/%
2014-Present	B. Tech, Computer Science & Engineering	Indian Institute of Technology, Kanpur	7.2*/10.0
2014	AISSCE, CBSE XII BOARD	Burhanpur Public School, Burhanpur	89.6 %
2012	AISSE, CBSE X BOARD	N. M. S. S. S., Burhanpur	10.0/10.0

: CPI at the end of Four Semesters

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 197** in **JEE Advanced 2014** amongst 150 thousand candidates.
- Selected for **Kishore Vaigyanik Protsahan Yojana**(KVPY) Scholarship-2014 under stream SX with a rank of **226**.
- Secured **99.97 percentile in JEE Mains 2014 Test** among 1.5 Million candidates.
- Received **A* grade** for exceptional performance in **Data Structures and Algorithms** course.
- Amongst top 300 students qualified for **Indian National Astronomy Olympiad 2014** conducted by **HBCSE.**
- Member of team which received Best Sectional Project Award in course project of Manufacturing Processes(TA201A)

COMPETETIVE PROGRAMMING

- Secured **Rank 304** in **Snackdown 2016 Online Qualifier** among 3600 teams selected among 13000 teams.
- **Expert level** participant on Codeforces in Live contests. (Handle: Tulsyan)
- Best Ranked 212 internationally among 8400 people in Codeforces Round 360 Div 2.
- Rating of 5193.2 for long contests on Codechef. (10 days long monthly programming contests)

PROJECTS

- **BAJA SAE, IITK Motorsports** (budget: INR 1 Million)   *Jan '15 – Jan '16*
  Faculty Advisor: Prof. Avinash Kumar Agarwal, Department of Mechanical Engineering
  - Amongst the 24 members of the team who worked on a **yearlong project** which involved **designing and manufacturing** an **All-Terrain Vehicle** and competed in **Baja Student India '16**, held in Noida in Jan '16.
  - **Lead the Chassis subsystem** during the designing phase of **3 months during summer**. **Optimized the strength and weight** of the roll cage by **virtual designing and simulation**. Intensively simulated the CAD Model for ensuring the **reliability of structure and safety of driver.**
  - The Team stood 13th in Overall ranking, 6th in the Design event, 4th in both Acceleration and Maneuverability event.
- **Stable Matching Problem: Course Project CS201A (Discrete Mathematics)**   *Sept. '15 – Nov. '15*
  Supervisor: Prof. Rajat Mittal
  - Studied the **Gale-Shapely Algorithm** for obtaining a stable match, proved the correctness of algorithm, coded the algorithm in C language, Studied **Principle of Deferred Decisions** and many applications of it in different scenarios of matching. Analyzed Time complexity of the algorithm and derived an upper bound for it.

RELEVANT COURSEWORK

Computer Science:	Operating Systems *, Algorithms II *, Data Structures & Algorithms, Computer Networks *, Theory of Computation *, Computer Organization, Computing Laboratory – I & II*
Others:	Discrete Mathematics, Linear Algebra & Ordinary Differential Equations, Analytical Calculus, Abstract Algebra, Intro to Logic, Probability & Statistics, Electronics, Intro to Electrical Engineering

* - Ongoing

TECHNICAL SKILLS

Programming Languages	C/C++, Verilog, HTML, CSS, JavaScript, PHP, Shell scripting, Assembly
Softwares & OS	Git, LaTeX, Vim, Octave, Microsoft Office, Solidworks, Ansys, Linux, Windows

POSITIONS OF RESPONSIBILITY

- **Chassis Subsystem Lead,** *IITK Motorsports*   *Feb '16 – July '16*
  - Leading the chassis subsystem populated with 8 newer team members, Planned the goals and strategy of the subsystem through regular meetings and ensured that the set deadlines were met.
- **Student Guide,** *Counseling Service*   *April '15 – April '16*
  - Helped in conducting the Orientation for more than 800 incoming freshmen. Supported and Provided emotional support a group of 8 freshmen personally to get acclimated to the new college environment.
- **Academic Mentor,** *Counseling Service, IIT Kanpur*   *March '15 – March '16*
  - Tutored freshmen of 2014 and 2015 batch and helped them with their difficulties in Introduction to Programming Course. Took Institute level remedial classes and one-to-one mentoring to help academically weak students.

EXTRA CURRICULAR ACTIVITIES

- Competed in Code.Fun.Do 2015 and made an application which intends to smoothen out document handling.
- Designed a Website for Institute's SAE team.