Ayush **Tulsyan**

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EDUCATION

April 2018	B.Tech (Computer Science And Engineering)	IIT Kanpur	7.2/10.0
April 2014	Class XII (Central Board for Senior Education)	B.P.S. Burhanpur	89.60 %
April 2012	Class X (Central Board for Senior Education)	N.M.S.S. Burhanpur	10.0/10.0

ACADEMIC ACHIEVEMENTS

- Secured AIR - **197** in **JEE (Advanced) 2014** among 125K Candidates
- Secured **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)

ACHIEVEMENTS IN PROGRAMMING

- Secured Rank **46**th in **ACM-ICPC India Regionals, Online round 2016** among 3000 teams from over the country.
- Secured Rank **304**th in **Snackdown 2016 Online Qualifier** among 3600 teams selected among 13000 teams.
- Best Ranked 212 internationally among 8400 people in Codeforces Round 360 Div 2.
- Rating of 7821.67 for long contests on Codechef. (10 days long monthly programming contests)

PROJECTS

NACHOS OPERATING SYSTEM: July '16 - Ongoing

- **Course Project** for course **CS330A**: Operating Systems, under **Prof. Mainak Chaudhuri**.
- **Extended** the NachOS operating system to perform basic operating system functions including **Fork, Join, Sleep, Exec** and **Exit**.
- Implemented and evaluated performance of various algorithms for scheduling processes including **Non-Preemptive FCFS, Shortest Job First, Pre-emptive Round Robin** and **UNIX Scheduling**.

BAJA SAE, IITK MOTORSPORTS: Jan '15 - Jan '16

Faculty Advisor: Prof. Avinash Kumar Agarwal, Dept. 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.

OTHER MINOR PROJECTS:

- Made a **html and a proxy server** for GET requests in C++ as a project under Course **Computer Networks** using a Parsing Library.
- Analyzed and Suggested Improvements for **Stable Marriage Algorithm** as a project in course **Discreet Mathematics** under Prof. Rajat Mittal.

POSITIONS OF RESPONSIBILITY

Feb '16 - July '16	Subsystem Head, Chassis, IITK Motorsports
Apr '15 - Apr '16	Academic Mentor (ESC101A), Counselling Service
Jun'15 - Apr '16	Student Guide, Counselling Service

TECHNICAL SKILLS

Programming Languages	C, C++, Assembly
Programming Languages (Familiar):	Java, CSS, JavaScript, PHP, MySQL, MatLab, Verilog, GNU Octave
Software and Utilities:	Git, GNUPlot, LaTeX Dassalt SolidWorks, Ansys Structural

RELEVANT COURSES

| *Computer Science:* | Operating Systems*, Algorithms II*, Data Structures & Algorithms, 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 |

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.