Mayank **Sharma**

UNDERGRADUATE · COMPUTER SCIENCE AND ENGINEERING

Indian Institute of Technology, Kanpur

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Educational Qualifications

Year	Degree	Institution(Board)	CGPA/%
July'16 – Present	B.Tech, CSE	Indian Institute of Technology, Kanpur	6.53/10.0
2016	AISSCE – XII	Children Sr. Sec. School, Dadabari, Kota	92.0%
2014	CBSE – X	Central Academy Sr. Sec. School, Chittorgarh	10.0/10.0

Academic Achievements

2016 **All India Rank 630**, JEE Advanced 2016 among 200 thousand selected candidates.

2016 **All India Rank 2237**, JEE Mains 2016 among 1.2 million candidates.

2015 **All India Rank 854**, KVPY Fellowship Award awarded by Department of Science and Technology, India.

2016 **State Top 1 percentile**, National Standard Examination in Physics

2014 **All India Rank 1707**, National Science Talent Search Examination among 3.2+ Lakh applicants.

Work Experience

Software Developer Intern, EarlySalary   *Pune, India*

PICKUP SYSTEM CASE ALLOCATION AUTOMATION   *Summer 2018*

- Worked on the backend of a scalable web app, and helped migration from existing PHP based system.
- Implemented cetralized authentication and authorization, using Jumpcloud's Directory-as- a-Service (LDAP).
- Helped design APIs and algorithm, to retrieve a new case and automatically assign to a Pickup Agency based upon its priority in a cluster, as soon as a new case is added.
- Developed Microservices for Lambda based REST APIs, and Prevented XSS into the existing MySQL Databases.
- Helped deploy the REST API as AWS Lambda Functions using Claudia.js.
- **Techonologies Used**: Express.Js with Node.Js, Typescript, Redis (as session store), MySQL, LDAP, AWS Lambda Services

Projects

Course Group Project (TA-202)   *IIT Kanpur*

CABLE BRAIDING MACHINE, IIT KANPUR   *4th Semester*

- Worked on a gear-driven Cable Braiding Machine to braid multiple threads simultaneously.
- Used various Mechanical Processes, including Lathe to fabricate the required parts.

The Automatic Stamper   *IIT Kanpur*

TA-201 GROUP PROJECT   *3rd Semester*

- Worked on a stamper, which if connected to a motor could stamp four times in one revolution.
- Used the Geneva Mechanism and Chain & Sprocket Mechanism to drive the stamper.
- Used the mechanical processes of Casting, Brazing, Welding and Sheet Metal Forming to build it.

Relevant Courses and MOOCs

Data Structures & Algorithms	Intro. to Machine Learning (i)	Computer Networks (i)
Operating Systems	Algorithms 2	Theory Of Computation
Introduction to Programming	Discrete Mathematics	Logic in Computer Science
Abstract Algebra	Numerical Methods & Approximations	ML by Andrew NG (Coursera)

i: *In progress*

Skills

Programming	Javascript and Typescript (*Proficient*), C++, Python, C, Bash Scripting, MATLAB
Web	Express.js with Node.js (*Fluent*), Angular 4, MongoDB (Mongoose as ODM), AWS Lambda & EC2
Databases & Utilities	MySQL, Redis, LDAP, Git, LaTeX, Vim, AutoCAD
Operating Systems	Linux (Arch, Ubuntu & LFS), Windows

Positions of Responsibility

- **Head, Web Development, Entrepreneurship Cell, IIT Kanpur** *(April '18 - present)*
  - Spearheading a team of 10+ Senior Web Developer Executives, effectively distributing development work and collaborating in a Git Organization ⬈ .
  - Developed various websites for E-Cell, including the homepage, and sites for various events, round-the-year.
  - Worked on Campus Ambassador and Events Registration Portals, and administered EC2 instances for the same.
- **Webmaster, Hall 5, IIT Kanpur** *(November '17 - present)*
  - Redesigned and Revamped the then webpage of Hall 5 IIT Kanpur.
- **Senior Executive, Entrepreneurship Cell, IIT Kanpur** *(April '17 - March '18)*
  - Collaborated towards development of Past E-Summit website.

Interests

- Software Engineering Architectures & Design Patterns
- Backend Web Development & Linux System Administration
- Machine Learning and Data Science

Self Projects

- **Linux From Scratch ⬈ :**
  - Developed a Student Search in bash which scraped data from Office Automation Portal of IITK.
  - Used the ZeromQ library in python to implement client server model to play Collatz Conjecture Game.
  - Familiarised with Shell Utilities, Linux Architecture, Bootloaders, etc.
  - Created a bootable (SysVInit based) bare-bones linux distribution, compiling packages from tarballs, building upon the host system kernel and finally compiling the kernel for new distro.
  - Created Scripts in NodeJS and Javascript to fetch all the BLFS Packages along with their installation commands, storing them as JSON files.

Extracurriculars & Hobbies

- Lead an active lifestyle, regularly hitting the gym and **lost 20 Kgs weight** in the first year.
- Part of School Basketball Team playing at District Level, winning accolades for the team.