Mayank **Sharma**

UNDERGRADUATE · COMPUTER SCIENCE AND ENGINEERING

Indian Institute of Technology, Kanpur

☐ (+91) 9461240034 | ✉ msharma@iitk.ac.in | mayank8019@gmail.com | 🏠 mayanksha.me | 🆔 mayanksha | 🔗 mayanksha

Educational Qualifications

Year	Degree	Institution(Board)	CGPA/%
July'16 – Present	B.Tech, CSE	Indian Institute of Technology, Kanpur	6.6/10.0
2016	AISSCE – XII	Central Academy Sr. Sec. School, Chittorgarh	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

2012 **All India Rank 1707**, National Science Talent Search Examination among 3.2+ Lakh applicants.

Projects

ABU RoboCon 2018, Shuttlecock throwing Robots *IIT Kanpur*

MEMBER, TEAM ROBOCON IIT KANPUR, PROF. ASHISH DUTTA *ongoing*

- Working on an Autonomous Robot capable of playing *ném còn* (Vietnamese Game, literally, throwing Shuttlecock).
- Using an Intel Realsense Depth Camera for 3D image processing to detect the Shuttlecock.
- Attempted ball-tracking by means of CamShift and Optical Flow (surrounding restrictions, hence shifted to stereo imaging) in OpenCV.
- Collaborated in the designing and making of Manual Robot which hands Shuttlecocks to Autonomous Robot.

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

Introduction to Programming

Abstract Algebra

Mathematics II

Data Structures & Algorithms (*i*)

Discrete Mathematics

Numerical Methods & Approximations

Machine Learning by Andrew NG (Coursera)

Logic in Computer Science

Mathematics I

CS 229 (ML by Andrew NG) Stanford (*i*)

i: In progress

Skills

Programming C++, Python, C, Javascript and Typescript, Bash Scripting, MATLAB

Web Angular2, Express.js with Node.js, MongoDB (Mongoose as ODM)

Tools & Libraries OpenCV, SciPy, Git, LaTeX, Vim, AutoCAD

Operating Systems Linux (Arch, Ubuntu & LFS), Windows

Positions of Responsibility

- **Senior Executive, Web, Entrepreneurship Cell :** Setup Two forms which posted their responses to an express server hosted on an EC2 Instance.

- **Webmaster, Hall5 :** Redesigned the website from scratch based on its Pool Theme - Mughals.

- **Core Team Member, Vox Populi :** Actively contributed towards writing of articles for the Institute Journalism Body.

Interests

- Linux System Administration and Automation
- Image Processing and Computer Vision
- Machine Learning and Data Science
- Web Development

Miscellaneous

- **YouTube Search Web App :** A YouTube search suggestion app written in Angular 2 using rxJS library with the YouTube API.
- **Reddit-like Community App (anonymous posting) :**
  - Made as a part of learning Angular2 for better understanding of interaction of Components and Services.
  - Used Angular2Material and FlexLayout as a responsive material design framework.
- **Personal Portfolio Page :** Used an EC2 Instance to host the personal portfolio page. (Link : http://mayanksha.me)

Extracurriculars & Hobbies

- Lead an active lifestyle, regularly hitting the gym and lost 20 Kgs weight in the first year.
- Was part of School Basketball Team playing at District Level.