SOUMYE SINGHAL

SOPHOMORE · COMPUTER SCIENCE AND ENGINEERING, IITK

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EDUCATION

Year	Degree	Institue	CGPA/Percentage
2015-19	BTech CSE	Indian Institue of Technology, Kanpur	9.8
2015	12th | CBSE	Bal Bharati Public School Pitampura, Delhi	95.4%
2013	10th | CBSE	Bal Bharati Public School Pitampura, Delhi	10.0

HONORS AND AWARDS

- All India Rank 579 , JEE ADVANCED   2015
- 0.1 Percentile , JEE MAINS   2015
- KVPY Fellow \| All India Rank 272 , IISc Bangalore and Government of India   2013
- All India Top 30 , Group Mathematics Olympiad \| CBSE   2013
- JSTSE Scholarship Awardee , Government of Delhi   2012

PROJECTS

Autonomous Underwater Vehicle (AUV)

Member, Team AUV-IITK, Prof. K.S. Venkatesh & Prof. Sachin Shinde   IITK

- Part of the team that built our institue's first AUV.
- Were placed 2nd at the national level competion SAVe, organized by NIOT Chennai.
- The aim of the Robot is detecting and following a line, hitting a buoy, firing torpedoes at given targets and dropping objects underwater.
- Used Robot Operating System (ROS) for Controls and OpenCV for Image Processing.

GymkhanaLive: NEWS Webapp

Summer Project, Programming Club   IITK

- Programmed a News Web Application using Django for the use of the campus community akin to twitter/quora.
- The website displays the news and events of the various clubs and groups on campus.
- Implemented features like login, search, like and comment.

Diophantine Equation

Course Project, Prof. Nitin Saxena   IITK

- Read about various methods to solve Diophantine Equation.
- Gave a presentation on the project also.

System Security

Course Project, Prof. Sandeep Shukla   IITK

- Exploited various vulnerabilites like BufferOverflow, Format string in Zoobar Sever's code.
- Fixed bug in the code to prevent attacks.

SKILLS

Programming	C/C++, Python, X86 , MIPS, ROS, OpenCV, Octave, R
Web	Django, JavaScript, HTML, CSS
Utilities	Bash, Git, GDB, LaTeX, Sublime, Vim
Platforms	Windows, Linux(Ubuntu), Arduino, Android

RELEVANT COURSES

Completed

Introduction to Programming**	Partial Differential Equation	Linear Algebra**
Introduction to Electrodynamics	Multivariable Calculus*	Abstract Algebra
Introduction to Classical Mechanics	Discrete Mathematics	Thermodynamics
Introduction to Electronics	Logic in Computer Science	

Ongoing

Data Structures and Algorithms	Probability and Statistics	Computer Organization
Computer System Security	Computer Laboratory	Introduction to Economics

* : A* Grade for exceptional performance

** : Batch Highest

POSITIONS

Secretary, Programming club IITK

- Helped organize Linux Installation Drive, Freshers Proramming Contest and other activites.
- Helped in the functioning of the club by organizing contests and lectures on various topics.

Secretary, Science Coffee House

- Part of a Hobby Group that regularly meets to discuss various scientific topics.

Project Mentor, ACA IITK

- Mentoring 6 students on a project on System and Cyber Security.

MISCELLANEOUS

- Google Devfest | Made a weather and sports application for Android.
- Electromania | Made an Egg-Basket game using Digital IC's and logic gates.