

B. Anshuman

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Sophomore Undergraduate
Electrical Engineering IIT Kanpur

in b-anshuman13
ba-13
newpov13

PROJECTS

Game of Blocks | Science and Technology Council, IIT Kanpur **Aug 2021 — May 2021**

- Involved understanding the underlying principles of BlockChains, how the system succeeds to be trustworthy in an otherwise environment, how the concept is applied to Cryptocurrencies, focussed on Ethereum
- Included going through the basics of Game Theory for applying its concepts in the development of 2 Smart Contracts, on IRV and Dutch Auction Mechanism implementations, using Solidity and deploying on web3 as dapps

Numbers Made Dumber | Stamatics, IIT Kanpur **Apr 2021 — Jul 2021**

- Based on understanding the principles of Number Theory, topics that were oriented more towards Cryptography
- Worked towards implementation of standard cryptographic algorithms including RSA and SHA

Computational Astrophysics | Science and Technology Council, IIT Kanpur **May 2021 — Jul 2021**

- Was introduced to Astrophysics and understood the usual conventions and patterns used throughout the field
- Worked with Python's Astronomy dedicated library Astropy, with problems based on datasets from standard sites including Vizier and SDSS

ML with Julia | Association for Computing Activities, IIT Kanpur **May 2021 — Aug 2021**

- Explored the language Julia and implemented Logistic Regression Models from scratch in the language
- Explored Linux system with basic CTFs and Exercism
- Got acquainted to dealing with the mathematical operations and how they are represented in computers, including rationals and gradients

EXPERIENCE

Technical Team Member **Apr 2021 — Present**

Aerial Robotics, IIT Kanpur

- Working in a team on Autonomous UAVs. Till now based on simulations, via ROS-Gazebo integrated environment
- Currently working on a project to implement a ROS Package based on the CSRT Tracker, involving the AUV to follow its prey.
- Working on implementation of the SLAM (Simultaneous Localisation and Mapping) algorithm for effective autonomous navigation, going through the concepts of Kalman Filters

Secretary **Sep 2021 — Present**

Programming Club, IIT Kanpur

- Position of Responsibility of conducting workshops, offering projects and organising hackathons for freshmen
- Contributing to the Club's repositories, which are based on practical and deployable projects, that directly affects the campus community, the repos also includes collection of implementations of research papers

Secretary **Jul 2021 — Present**

Design and Animation Club, IIT Kanpur

- Took part in Team based Rebranding event, the team securing 2nd position out of 9 teams of proficient designers.
- Position of Responsibility of holding workshops and introducing freshmen to the concepts of design

Senior Executive, Design **Aug 2021 — Present**

Udghosh, IIT Kanpur

- Part of the Design Team, involves creating posters and graphics for Udghosh, IIT Kanpur's Sports Fest, throughout the year
- Currently working on the rebranding of the fest's theme.

EDUCATION

Indian Institute of Technology Kanpur, **Nov 2020 — May 2024(Expected)**

Electrical Engineering Sophomore Undergraduate,
CPI: 9.18/10.00

Jawahar Vidya Mandir Shyamali, Ranchi, Jharkhand **May 2018 — Jun 2020**

Class X (2018): 97.3%
Class XII (2020): 96.7%

TECHNICAL SKILLS

Languages	C, Python, C++, Javascript, Julia, Solidity, Bash Scripting, Octave, Haskell
Frameworks/Softwares	Node.js, ROS, Gazebo, Qt, OpenCV, Pytorch, Adobe Photoshop, Illustrator and AfterEffects, Figma, Blender, Inkscape, Godot
Utilities	Git, Vim, Radare, \LaTeX , Docker, Linux Shell, Conda, HUGO, Rappel

RELEVANT COURSEWORK

Fundamentals of Computing	Linear Algebra	Differential Equations
Real Analysis	Physics I - Mechanics	Physics II - Electrodynamics
Introduction to Electronics ⁱ	Signals and Systems ⁱ	Complex Analysis
		i - Currently in progress

AWARDS & HONORS

2020	All India Rank 651 , JEE Advanced
2020	All India Rank 1638 , JEE Mains
2020	KVPY SX Scholarship Awardee , Govt. of India
2019	KVPY SA Scholarship Awardee , Govt. of India
2018	NTSE Scholarship Awardee , Govt. of India