

Academic Qualifications			
Year	Degree/Certificate	Institute	CPI/%
2019 - Present	Bachelor of Technology	Indian Institute of Technology Kanpur	8.1/10.0
2019	CBSE (XII)	Amardeep School, Firozabad	88.8%
2017	CBSE (X)	St Johns School, Firozabad	10.0/10.0

Scholastic Achievements

- Secured **All India Rank 3786** in **JEE Advanced 2019** among 2.24 lakh successful candidates from JEE Mains
- Awarded **A*** grade for excellent performance in **Undergraduate Research Project** in field of Computational Biology at IITK

Corporate Experience

NoBroker Technologies Solutions Pvt Ltd Summer SDE Intern, Payments Team		(May'2022-Jul'2022)
Objective	<ul style="list-style-type: none">Develop a payment routing dashboard to streamline the on boarding of rules required for static payment routingAPI should collect, analyse and display real time metrics and integrate it with production codebase.	
Approach	<ul style="list-style-type: none">Created a mechanism for rerouting payment transactions to optimal gateway based on specified parametersUtilized SpringBoot for bootstrapping with MongoDB as primary database and Redis for cache managementUsed React for front-end development with redux for state management and saga for managing side effectsDesigned and implemented test cases for unit testing using Junit and Mockito according to company protocols	
Results	<ul style="list-style-type: none">Led to transaction cost optimisation, better success rate, PSP outage protection and payment load distributionHoping to receive Pre Placement Offer after receiving positive remarks from mentor and other team members	

Identification of differentially expressed genes in-silico Dr. Sai Pydi MMCS Lab, IIT Kanpur		(Jan'2022-May'2022)
Objective	<ul style="list-style-type: none">Build a single-cell analytic pipeline to identify Differentially Expressed Genes in mice under diverse conditions	
Approach	<ul style="list-style-type: none">For downstream analysis, pre-processed data according to specifications outlined in the relevant research articlesUtilized Seurat, Matrix, ggplot2, and tidyverse among other R tools to code an entire pipeline and generate plotsUsed dimensionality reduction techniques (tSNE and umap) and generated heatmaps to compare different controls	
Results	<ul style="list-style-type: none">Facilitated analysis of 50+ published scRNA sequencing datasets related to mice metabolism using the pipelineIdentified primers for gene expression verification by in vitro & in vivo experiments in diet induced obesity models	

OOkul Samadhan Pvt Ltd Summer SDE Intern		(May'2021-Jul'2021)
Objective	<ul style="list-style-type: none">Develop from scratch a website, iOS, and Android mobile application for an edtech firm in its early stagesThe platform should allow instructors to hold lessons and examinations, and for students to monitor their progress	
Approach	<ul style="list-style-type: none">Built a MERN stack based application with social media authentication and Razorpay for monetary transactionsUsed Nextjs for Server Side Rendering with Redux for state management and a WYSIWYG Rich Text EditorDeveloped the applications for Android and iOS with React Native, and Expo for maintaining native workflow	
Results	<ul style="list-style-type: none">Hosted the website on company's servers and published the android application on Google play store	

Self Projects

- Student Search IITK** (May'2020)
 - Used **Puppeteer** for scraping data from IITK Automation Portal to collect data and stored it on **MongoDB** Atlas Cloud
 - Implemented **D3js** graphic library to display IITK-Family Trees and OTP based authenciation using **NodeMailer**
- Mafia** (Dec'2020)
 - Worked with SocketIO library to handle event triggers in Real Time web game and hosted it on cloud using Heroku
- Virtual Board** (May'2021)
 - An OpenCV python based platform where user can use fingers to write on a **Virtual Board** in the screen using the webcam
 - Used Google's **MediaPipe** library to distinguish between fingers and detect finger movements and **OpenCV** to alter screen
- MinLinks** (March'2021)
 - Hosted on Heroku for users to store, share and **minimize** their daily use links like Zoom and Google Docs
- Introduction To NFTs** (December'2021)
 - Studied about different standard smart contracts and worked with ERC721 contracts and used **postgresql** as database
 - Implemented The Graph subgraphs for indexing and querying blockchain data in a decentralized environment with graphql
- Strategy Backtesting System** (June'2022)
 - Developed a python platform to screen equities and backtest trading strategies, used tkinter library for GUI interface to make strategies
 - Implemented OHLC, Helkin Ashi charts, Supertrend and used Ta - Lib for using technical indicators like RSI, ADX etc
 - Designed and coded an Entry/Exit condition checker engine and plotting libraries to visualize all entry and exit conditions
 - Applied **S-ARIMA** model to generate trading signals and used log-likelihood test to find optimum model parameters

Technical Skills	
Programming Languages:	C, C++, L ^A T _E X*, Python, Nodejs, R, HTML, JavaScript, CSS, Reactjs, React Native, Java, SQL
Software and Utilities:	Git, MS office, AutoCAD*, SpringBoot, Adobe Ecosystem, OpenCV*, MongoDB *Exposure

Relevant Coursework

- Data Structures and Algorithms
 - Bioinformatics & Computational Biology
 - Introduction to computational sociology
 - Probability and Statistics
 - Computational method in Engineering
 - Manufacturing Energy Systems
 - Introduction to Programming
 - Derivative Contracts*
 - Modern Cryptology
- *:Ongoing

Position Of Responsibilities

- **Academic Mentor and Student Guide, Counselling Service** (Sept'2020-June'2021)
 - Guided freshers to adapt to IITK Academic structure and conducted **Live Classes** of LIF101 with more than **100** students
 - Mentored 6 Freshers in their smooth transition to IITK life and assisted them in their registration during **Orientation**
- **Company Coordinator, Student Placement Office, IITK** (July'2020-May'2021)
 - Helped in conduction of shortlisting test and interviews during **Intern and Placement season** 2020 by acting as a link between company officials and students and worked with team of 40 in scheduling interviews and maintaining logistics
- **Secretary, Film Club** (Jun'2020-May'2021)
 - Helped conducting workshops For Freshers and make videos using **Adobe Premiere pro, After Effects, cinema4D**
 - Represented IITK at film-making competitions at **Inter-IIT Cult Meet 2019** and, Indian Film Project'19 and'20
- **Senior Executive,Media and Publicity,Techkriti'21** (Sept'2020-May'2021)
 - Contacted and established media partnership deals with media outlets like The Curriculum, Startup Success Stories, etc.
 - Guided a team of 12 Junior Executives for maintaining logistics , smooth conduction and covering events of Techkriti'21.
- **Secretary,Web Division, MnC** (May'2020-May'2021)
 - Designed and Coded the official website of Media and Cultural Council in May'2020 and maintained it throughout the year
 - Website acted as a central hub for 10+ MnC clubs to host their events and had more than 1000 hits throughout tenure

Extra-Curricular Activities

- **Managerial:** Helped in setting question paper and organizing **TOSC'19**, IIT Kanpur competition in my home city, **Firozabad**
- **Science and Technology:** Took part in **RoboTrix** event of Takneek'19 and **Arduino-Design** competition of SNT Code 2019
- **Cultural:** Participated in various film-making competitions of Galaxy'20 and secured **First Prize** in Filmy-Debate Competition