

EDUCATIONAL QUALIFICATIONS

Year	Degree/Certificate	Institution	Performance
2016-Present	B.Tech. Materials Science and Engineering	Indian Institute of Technology, Kanpur	4.6/10
2015-16	Class XII (RBSE)	Girdhari Lal Model School, SriGanganagar	85.60%
2013-14	Class X (CBSE)	Sacred Heart Convent School, Suratgarh	10/10

PROFESSIONAL EXPERIENCE

New York Office, IIT Kanpur | Intern, Web Developer

May 2018 - July 2018

Project Supervisor: Prof. Manindra Agrawal, Department of Computer Science and Engineering

Objective	<ul style="list-style-type: none"> Continuous integration of new features on a scalable microservice-based web application
Strategy	<ul style="list-style-type: none"> Used ngrx/store for maintaining the state of the application and integrated it with the backend Overhauled UX of application by implementing search functionality to enable swift browsing through application Led a team of 4 members to improve the UI by implementing sign/signup, redirection features
Impact	<ul style="list-style-type: none"> Implemented an Angular application as per the Redux architecture for easy extensibility and modularity

Bliss, IIT Kanpur | Intern, Web Developer

May 2018 - July 2018

Objective	<ul style="list-style-type: none"> Designed and built a scalable and responsive website from scratch with feature like playing videos, etc.
Strategy	<ul style="list-style-type: none"> Fetches realtime data through Firebase APIs using google firebase services such as firestore as database Synchronized and updated the data on any connected device using Cloud Firestore realtime update Utilized technologies like RxJS, fxFlex, ngx-carousel, Angular Material for improved and interactive UI/UX

PERSONAL PROJECTS

Sudoku Solver

June 2020 - July 2020

Objective	<ul style="list-style-type: none"> Build a Convolutional Neural Network model to solve Sudoku puzzle in an image in a real-time application
Strategy	<ul style="list-style-type: none"> Built an 8-layer CNN model using TensorFlow & Keras trained with MNIST and custom built dataset Preprocessed the image using techniques like bilateral filter, thresholding, contour and image features Extracted the Sudoku puzzle and its individual cell from the image using OpenCV and Skimage libraries Predicted the extracted digits using the model and solved the Sudoku puzzle using backtracking algorithm
Impact	<ul style="list-style-type: none"> Predicted the digits with an accuracy of 95.7% and solved the puzzle in an average time of 3.4 secs

Linux MiniShell

July 2020 - Aug 2020

Objective	<ul style="list-style-type: none"> Build a command line interpreter, imitating the Linux shell, able to run in both interactive and batch mode
Strategy	<ul style="list-style-type: none"> Used POSIX threads for implementing multithreading to execute multiple commands simultaneously Parsed the input string into different commands using getopt system call and other string parsing techniques Implemented different special characters like pipes, input/output redirection using Linux system calls Used readline library for keeping history of command, recovering history using arrow keys and autocompletion
Impact	<ul style="list-style-type: none"> Implemented 25+ Linux shell commands from scratch and pipelined them for interactive user experience

IMPORTANT COURSES AND CERTIFICATIONS

Courses	<ul style="list-style-type: none"> Data Structures And Algorithm by Indian Institute of Technology Kanpur(*ongoing) Fundamentals of Computing by Indian Institute of Technology Kanpur
Coursera	<ul style="list-style-type: none"> Deep Learning Specialization by deeplearning.ai Python for Everybody Specialization by University of Michigan

LEADERSHIP POSITIONS

Senior Executive, Web and Android Developer, Udghosh, IIT Kanpur

Aug 2017 - Nov 2017

Initiative	<ul style="list-style-type: none"> Designed and built responsive websites from scratch to track college representatives from all over India
Strategy	<ul style="list-style-type: none"> Developed the festival portal responsible for the registration of more than 2300+ participants Integrated Firebase to store and sync data in real-time across all connected clients and devices
Leadership	<ul style="list-style-type: none"> Recruited and guided 5 web executives; Worked collaboratively by delegating chores and responsibilities

EXTRA-CURRICULAR ACTIVITIES

Technical	<ul style="list-style-type: none"> Participated in CodeFunDo organized by Microsoft and built a Sentiment Classifier for news feed 	2018
Sports	<ul style="list-style-type: none"> Secured 1st position in Badminton among 17 teams during Freshers' Inferno at IIT Kanpur Experience of 2 years in deep water swimming; Regular aquatics participant at IIT Kanpur 	2016 2017-19
Cultural	<ul style="list-style-type: none"> Secured 1st position in Group Dance event and won the overall dance trophy in Galaxy competition 	2017