

Md Amir Shohail

Final Year Undergraduate

Department of Computer Science and Engineering

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Education

Degree	Institution	CPI/%	Year
B.Tech	IIT Gandhinagar	7.7	2019- Present
Class XII	Nezamiah Public School, Patna	88.4	2017-2018
Class X	St. Joseph's Sr. Sec. School, Muzaffarpur	10.0	2015-2016

Internships

- **Intern, Intelligent Motion Planning, IIT Gandhinagar** [May - July 2021]
 - Worked on the topic of "Intelligent Motion Planning for Multi-Robotic Systems in Structured and Unstructured Environments."
 - Understood PyBullet and Gym to simulate and visualize intelligent motion planning Reinforcement Learning.
 - Created rectangular trajectories for drone navigation. Coding have been done in python.
 - Learned and understood the implementation of the drone and its environment via virtually and programmatically, like how the drones are created virtually, how the drones are controlled, how to set the track for the drones, how the obstacles or the surrounding environments are made, what are the physics and dynamics of drones, and visualize the whole motion of drones.

Projects

- **Web Developer, Website development, Student Affairs at IIT Gandhinagar** [July 2022]
 - Created responsive websites for the student affairs of IIT Gandhinagar.
 - Learned HTML, CSS and JavaScript and implement on the web development.
 - Built 3 webpages and uploaded on IIT Gandhinagar website.
- **Self Learner, ECommerce Website, 6PackProgrammer (YouTube)** [June-Aug 2023]
 - Learned through youTube of using React, MongoDB, Express, and Node.js.
 - Understood to design and to create a full-stack e-commerce website for online shopping through youTube.
 - Wrote and understood the code that the youTuber had written, and reimplement in mine CodeEditor.
 - Learned that how to build large application which combines frontend and backend features.
- **Self Learner, ECommerce App Development, EngineerCodeWala (YouTube)** [June-July 2023]
 - Learned through youTube to create a shopping app using React Native, Redux, and Expo.
 - Understand through youTube to ensure a seamless user experience for mobile shoppers.
 - Wrote and understood the code that the youTuber had written, and reimplement in mine CodeEditor.
 - Learned how to build a mobile App with Expo and connect it with VS code editor.

Projects

- **Student, Basic Compiler, Compiler Course** [Jan-April 2023]
 - Learned to build a basic compiler in Python with support for binary operations, variable assignments, loops, and more.
 - Implemented our team's syntax for code input and execution.
 - Understand and learned the concepts of OOPs, Lexer, Parser, Abstract Syntax Tree, Handling Error, Type-checking.
 - Learned about environment creation and scope management and adding, getting, updating and checking the elements inside the scope.
- **Self Learner, Neural Network for Planer Data Classification, Coursera** [May 2022]
 - Learned how to build a three layers Neural Network and trained it on the sklearn dataset.
 - Plotted the dataset using matplotlib.pyplot from python.
 - Learned to implement random mini batches, sigmoid function, forward-propagation function, cost function, back-propagation function, update parameters with different optimisers.
 - Understood to implement the different optimizers like Adam, momentum and gradient descent and to optimize using exponential weight learning rate decay with fixed interval scheduling.
 - Learned to draw decision boundary on the sklearn dataset.
- **Self Learner, L-layers Neural Network for Image classification, Coursera** [May 2022]
 - Learned to build given L number of layers of Neural Network model for image classification, coded in python .
 - Trained it to dataset of cat and non-cat images and learned to compute sigmoid, linear activation forward function, linear forward model, cost function, linear activation backward function, linear backward model, update parameters function, L layer model and prediction functions .
 - Tested it to new images with the varying number of hidden layers.

Positions of Responsibility

- **Sponsorship Executive, IIT Gandhinagar Cultural Fest** [Nov 2020-Mar 2021]
 - Communicated to the head or managers of the companies, industries, institutes and startups, and tried to convince them to invest money in our annual cultural fest.

Skill Summary

- **Programming Languages**
 - C++ (Intermediate), Python (Intermediate), JavaScript (Basic)
- **Web Technologies**
 - HTML (Intermediate), CSS (Intermediate), React (Basic), React Native (Basic), Redux (Basic)
- **Courses:**
 - Deep Learning (Coursera), Machine Learning (Coursera)

Extra-Curricular Activities

- Volunteer for control room IIT Gandhinagar during Covid-19.