PRIYANSHU MITTAL

Surat · priyanshumittal0916@gmail.com · 9785841018 · https://priyanshu12mittal.github.io/

Education

NIT Surat Surat, Gujarat
B.Tech Electronics and Communication *GPA: 8.40* dec 2021 - May 2025

Work Experience

Google Winter Of Code Surat
Web Developer Dec 2022 - Jan 2023

- Collaborated with a team of 4 developers to build a responsive website for a fictional company using HTML, CSS, and JavaScript in a 2-day hackathon-style event
- Implemented smooth scrolling, responsive navbar, image sliders, and modals from scratch to enhance UI/UX
- Presented finished project to a panel of judges and received good response

Skills

Programming Languages:	Python, C, Assembly, JavaScript
Frameworks/Libraries:	TensorFlow, Pytorch, Scikit-learn, NumPy, Pandas
Web Development:	HTML, CSS, Javascript, React
Data Structures and Algorithms:	Expert level knowledge from solving 500+ problems on LeetCode in Python.

Projects

Snake Game Reinforcement Learning *Python, PyTorch, PyGame*
Implemented Q-learning algorithm to train AI agent to play snake game, teaching itself based on rewards
Used concepts like state representation, reward formulation, and neural network function approximation
Achieved agent able to consistently score over 40 points.

Brain Tumor Detection *Python, Panda, Matplotlib, VGG-16*
Developed machine learning system to automatically detect brain tumors from MRI scans, achieving 89% accuracy. Used convolutional and capsule neural networks to identify tumor regions in brain images.

Heart Attack Prediction *Python, Pandas, Matplotlib, Seaborn, Sklearn*
Developed XGBoost model to predict heart disease using 300 patient records, achieving 82% accuracy.
Performed extensive data exploration, feature engineering, model tuning with grid search cross-validation.
Key techniques: data transformations, one-hot encoding, k-fold validation, XGBoost, hyperparameter optimization. Optimized model improves heart disease predictions to assist clinical decision making and care.

thisismagma clone *HTML,CSS,JavaScript*
Adapted thisismagma.com's front-end design with credits for an educational project while differentiating the site with original imagery and open-sourcing customized scripts

Certifications

Python Programming Udemy
Completed comprehensive Python 3 course covering core language, OOP, data structures, exceptions, modules, built-in functions

Machine Learning Specialization Coursera
Specialization by Andrew Ng covering Supervised, Unsupervised Learning, Reinforcement Learning, Neural Networks

Convulational Neural Networks and Deep Learning Coursera
Completed Coursera's CNN course, which covered the fundamentals of Convolutional Neural Networks (CNNs) and their applications in computer vision tasks such as image classification, object detection, and segmentation. Learned how to build CNN architectures using popular deep learning frameworks like TensorFlow and Keras, and gained hands-on experience implementing these models on real-world datasets