Harsh Panwar

Bridgewater, New Jersey | (732)-487-1294

Email: hp56@njit.edu **LinkedIn:** linkedin.com/in/hpanwar **GitHub**: github.com/Harsh-Panwar000

Education

New Jersey Institute of Technology   *2021-2025*
B.S. in Computer Science and Mathematical Sciences   GPA: 4.0
Albert Dorman Honors College: Dorman Honors Scholar
Coursework: (NJIT) Probability and Statistics, Physics II, Data Structures and Algorithms, Calculus III, Discrete Mathematics; (High School) Differential Equations, Linear Algebra, Introductory Fourier Analysis

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Projects

Covid-19 Map   *2020*
- Filtered, extracted, and combined relevant data using 'Pandas' framework from 2 datasets on COVID cases and country locations with 100+ entries
- Mapped the data using 'Folium' package to create visual representation of COVID cases that accurately depicted the proportion of cases in a given geographic location

Tumor Classifier   *2020*
- Classified tumors as malignant using the UCI Machine Learning Repository on breast cancer tumors
- Implemented a KNN algorithm using 'Pandas', 'NumPy', and 'sklearn' resulting in 98% accuracy

BasketballPoints   *2021*
- Built a small web-scraper with the 'BeautifulSoup' library that summarized and outputted the career statistics of past/current NBA players that the user inputs

Taiwan House Predictions   *2020*
- Predicted house prices using UCI Machine Learning Repository for dataset on house prices in Taiwan
- Cleaned data and created a linear regression model that predicted prices with 70% accuracy

Digit Classifier   *2020*
- Created a 3-layer neural network to find the value of handwritten digits using data from MNIST
- Worked with 'TensorFlow', 'NumPy', and 'matplotlib' to implement a 'relu' and 'softmax' functions

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Extracurriculars

Physics Informed Neural Network Research   *2021-2022*
- Participated in research with Dr. Afkhami to incorporate physics into a neural network model
- Worked with Slurm Workload Manager, Bash, and AFS to run model on NJIT computing clusters

Programming Team   *2021-present*
- Practiced advanced technical interview and programming related concepts such as dynamic programming, sorting, hashing, etc.
- Prepared for future hackathons by further engaging in technical questions provided by the team

High School Debate   *2018-2021*
- Excelled in Public Forum style debate on the Varsity Debate Team
- 3x State qualifier with 5 total State bids
- Coordinated logistics for BRHS Home Tournament with SpeechWire software

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Volunteer Experience

VerDay Inc.
- Founded non-profit with friends with an aim to promote environmental sustainability
- Raised $10,000 by selling biodegradable cutlery – all net proceeds were donated to Autism Speaks

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Skills

Python (NumPy, Pandas, Pygame, TensorFlow, Matplotlib, Folium, BeautifulSoup), Java, MATLAB, Microsoft Office, AFS, Bash