Naishal Patel

+1 267-304-8559 | Gmail | LinkedIn | GitHub | Portfolio

EDUCATION

Rutgers University, New Brunswick, New Jersey   *Sep 2021 – May 2023*
Master of Science in Computer Science – Specialization in Machine Learning   *GPA: 4/4*
Relevant Courses: Data Structures & Algorithms, Intro to AI, Statistics, Massive Data Mining, Machine Learning, Database for Data Science

Dhirubhai Ambani Institute of Information and Communication Technology, India   *Aug 2016 - May 2020*
Bachelor of Technology in Information and Communication Technology   *GPA: 7.99/10*

RELEVANT EXPERIENCE

IT Research Support Specialist, *Rutgers University*   *Jan 2022 - Present*
- Mining, cleaning, preprocessing data and visualizations for research, from Reddit, Twitter, Volunteer Science, Qualtrics, Meltwater.
- Designing and implementing workflows using KNIME, Python, Java and JavaScript, TypeScript, HTML/CSS for NLP algorithms, helping more than 20 faculties and 1700 students with a non-coding background to efficiently utilize the tools for their research.

Software Developer, *Monocept, India*   *Nov 2020 - Apr 2021*
- Followed Agile development with SCRUM methodologies. Collaborated with 5 members of our team for the development of the two-wheeler insurance portal of ICICI Lombard.
- Solely responsible for the development and deployment of frontend components implemented using Angular and utilized C# for the backend.
- Optimized the architecture of existing components in Vue/Angular, resulting in a 4% improvement in startup time which impacted the user experience of over 200,000 customers.

Web Developer, *Atlantix Digital, India*   *Jun 2020 - Nov 2020*
- Worked with a team of 4 members using SCRUM methodology for the development of a SaaS platform related to eCommerce website development.
- Implemented frontend using React with Ionic Framework and utilized Python Flask for backend services and APIs.
- Designed and maintained database using MySQL with Redis as cache; also modified existing services which improved API latency by 15%.

Software Developer Intern, *Tata Consultancy Services, India*   *Jan 2020 - May 2020*
- Configured ERP models for HR Application in ServiceNow. Presented the modules to the clients as a demo of the benefits of using the ServiceNow Application which landed the company 2 more projects in the future.
- Used Angular JS, HTML, CSS, Bootstrap to configure pages of Service Now modules. Implemented custom widgets that send employee information entered by the HR to Service Now Tables.

PROJECTS

Voyage into the Unknown | *Python, Multiprocessing, Pandas, Matplotlib, Tensorflow, Keras*
- A semester-long project for the coursework: Intro to AI; where I designed and implemented algorithms, using A* as base and Machine Learning, for different variants of target finding agent in the given gridworld with obstacles, where the agent has no prior knowledge of the environment and learns about it as it traverses along the gridworld.
- Variables are as follows: 1) Target location 2) Stationary or moving target 3) Field of view of the agent 4) Inferring capability of the agent 5) Movement constraints 6) Cell type: block or unblocked 7) Terrain type of unblocked cells.

Traveling Salesman Problem Variations | *Python, Multiprocessing, PySimpleGUI, Matplotlib*
- Implemented three genetic algorithms: Ant Colony Optimization, Black Hole Optimization, Particle Swarm Optimization; to find a polynomial-time solution of an NP-Hard problem and analyzed the space and time complexity along with optimality of the solutions.
- Developed UI for taking user inputs and visualizing the output of resulting suboptimal shortest tour from a starting point traversing all cities.

Real-time Hair Detection system | *Python, OpenCV, PyTorch, CUDA, Numpy*
- Trained a Neural Network model (PSP ResNet) using PyTorch to detect hair with over 96% accuracy.
- Designed an application impacting the fashion industry using our trained model which detects the hair of the user in real-time. Users can also alter hair color using this application and check results in real-time.

Web application for Warehouse Management System | *PostgreSQL, HTML/CSS, JavaScript, Python*
- Designed and implemented a full-stack web application that allows the manager to keep track of goods and orders in multiple warehouses, and also customers can check the status of their orders. Designed a separate portal for both managers and customers.
- Used PostgreSQL to manage our database. Created tables and implemented detailed functionalities like generating Goods Receipt Note and Sales Invoice, managing purchase order and sales order.
- Implemented account ledger that allows inventory manager to keep track of bills and payments of both purchase and sales scenario.

TECHNICAL SKILLS

Languages:	*Python, Java, TypeScript, JavaScript, C/C++, C#, HTML, CSS, Matlab, R, SQL*
Frameworks:	*Angular, React, Vue, Django, Flask, REST APIs, AWS, .NET, PyTorch, Tensorflow, Keras*
Databases:	*MySQL, PostgreSQL, Redis*
Tools:	*Git, Github, Postman, Docker, CUDA, Visual Studio, Jupyter Notebook*

Leadership Experience/ Extracurricular activities

Rural Internship   *Dec 2017*
- *My team and I provided basic education to 120+ students in rural school. Taught technologies useful to use at village.*

Coordinator of football event for Concours-2k18   *Nov 2018*
- *My team and I handled fixtures and coordinated every aspect of the football match for the Annual sports festival of DAIICT.*

Volunteer for Synapse-2k18   *Feb 2018*
- *Worked with PR team to improve sales and marketing of various events of Synapse(Annual cultural festival of DAIICT).*