Dhvani Dineshbhai Patel

LinkedIn: linkedin.com/in/dhvani-patel/
Github: github.com/dhvani-d-patel

Email: dhvani.patel@mail.rit.edu
Mobile: +1-585-629-4285

Education

- **Rochester Institute of Technology** — Rochester, New York, USA
  Master of Science - Computer Science; GPA: 3.18 — *August 2017 - May 2020*
  Courses: *Computer Vision, Computer Graphics, Analysis Of Algorithms, Artificial Intelligence, Computational Geometry, Big Data Analytics, Cryptography, Advanced Object Oriented Programming.*

- **University of Mumbai** — Mumbai, India
  Bachelor of Engineering - Computer Science and Engineering — *June 2013 - May 2017*
  Courses: *Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Soft Computing, Computer Networks, Distributed and Parallel Computing, Microprocessors, Web Development, Database Management Systems, Digital Signal Processing.*

Skills

- **Programming Languages**: Python, Java, C++, JavaScript
- **Frameworks & Libraries**: OpenCV, Keras, Tensorflow, Pandas, Numpy, OpenGL, Scikit-learn
- **Web Development**: HTML, CSS, React, NodeJS, Bootstrap, MERN stack
- **Operating Systems**: MacOS, Linux(Ubuntu), Windows
- **Databases**: MySQL, MongoDB, R, Weka
- **Others**: Git, Jira, Azure Machine Learning Services, Agile Methodology

Professional Experience

- **Retail Business Services - Ahold USA** — Quincy, Massachusetts
  Software Engineer Intern — *Jun 2019 - Dec 2019*
  - **Emerging Technology Team**: Worked with the team on numerous projects following an agile methodology for researching and developing image recognition applications along with data-pipelining.
  - **Face Recognition and Demographics**: Worked with the ET team to develop a system to identify customers and gather their demographics such as age, gender, emotions which were encrypted and stored on the cloud.
  - **License Plate Reader**: Designed and implemented an application to alert a store when a customer's vehicle enters the parking lot of the store by reading their license plate and identifying the customer by performing a database check.
  - **Freshness of Produce Items**: Performed cloud deployments for the project using Azure Machine Learning Services.
  - **Technologies used**: Python, OpenCV, Keras, Tensorflow, CNN, MQTT, MongoDB, Azure ML Services, Git, DVC.

- **Department of Computer Science - Rochester Institute of Technology** — Rochester, New York
  Lab Manager, Graduate Assistant — *May 2018 - May 2019*
  - **Maintain Network Infrastructure**: Administered labs to maintain network infrastructure of over 300 machines running on Windows, Mac and Ubuntu OS.
  - **Leading a Team**: Led a team of 20 lab assistants every term.

Projects

- **Publisher-Subscriber System (Java, Distributed Systems, Socket Programming, Docker, Git)**:
  Developed a system similar to Youtube using publisher-subscriber model by implementing topic creation, content publication and topic subscription. Implemented and performed testing on Docker by creating a docker image and multiple containers.

- **Emotion and Gender Detection (Python, OpenCV, Computer Vision, CNN, Keras, Tensorflow)**:
  Developed an application to detect faces in live video and gather the details about the detected human such as gender(male, female) and emotion(happy, angry, sad, neutral, surprised, fear). The accuracy achieved for the model was 68.47%.

- **MovieTime - A Cloned Movie App (HTML, CSS, MERN stack - MongoDB, Express, React, Node.js)**:
  Designed and developed a movie application that creates a profile for users who can browse through different movies and add their favorite/to watch movies on a list. The website also allows the users to leave feedback for each movie in the comment section. Implemented multiple REST API's to facilitate all the database functionalities for the website.

- **ToDo List Application (Web Development, HTML, CSS, Bootstrap, React)**:
  Designed and developed a web application that performs basic CRUD operations for tasks in a ToDo List.

- **Image Captioning using Deep Learning (Python, OpenCV, NLP, CNN, RNN, Keras, Tensorflow)**:
  Developed an application which generates descriptions of the given image using encoder-decoder architecture for the neural network using visual attention.

- **3D Still Life Scene with Moving Objects (C++, Computer Graphics, OpenGL, GLSL, Blender)**:
  Recreated a 3D scene from a photograph using 3D transformations, depth effects, shaders and textures to replicate the photograph scenario.