Dhaval Popat

345 Ovington Ave, Apt 5C, Brooklyn, New York, NY 11209 | (646) 725-1645
dhaval.popat@nyu.edu | www.dhavalpopat.com

EDUCATION

New York University, New York, NY **May 2019**
Master of Science in Computer Science, GPA: 3.73/4.0
Selected Coursework: Cloud Computing, Big Data Analytics, Machine Learning, Data Science, Information Visualization

University of Mumbai, Mumbai, India **May 2017**
Bachelor of Engineering in Information Technology

TECHNICAL SKILLS

Programming Languages	:	Python, Java, C#, C, MATLAB
Web Technologies	:	HTML5, CSS3, Bootstrap, Kendo UI, jQuery, JavaScript, Node.js, D3.js, AJAX, PHP, AWS
Tools & Frameworks	:	ASP.NET, Entity Framework, Django, Hadoop, Spark, Tableau, OpenCV, TensorFlow
Databases	:	MongoDB, DynamoDB, MS SQL Server, MySQL, PostgreSQL

PROFESSIONAL EXPERIENCE

Zebra Technologies, Hauppauge, NY **Jun 2018 - Aug 2018**
Software Engineering Intern (Technologies: C#, LINQ, SQL Server, jQuery, JavaScript, AJAX, REST API, Razor, Kendo UI)

- Upgraded legacy desktop system to a web application using ASP.NET MVC for seamlessly processing inventory orders.
- Analyzed client's requirements and implemented innovative functionalities that led to about 65% increase in user productivity.
- Improved forecasting accuracy by incorporating advanced features and designed SQL tables to efficiently support them.
- Enhanced shipping effectiveness by devising an intelligent carrier algorithm and integrating smart calendar controls.

NYU Langone Health, New York, NY **Feb 2018 - May 2018**
Student Research Intern (Technologies: TensorFlow, OpenCV, PyQt, Python)

- Developed an interactive desktop application to facilitate cognitively impaired patients with text and voice based communication.
- Fine-tuned Faster R-CNN model with Inception v2 to verify cranial placement of an experimental treatment tDCS device.

Drishti Group, Mumbai, India **Jun 2017 - Aug 2017**
Computer Vision Intern (Technologies: OpenCV, Python, Django)

- Built a real-time surveillance system that detects and tracks people in deep sea water to prevent them from drowning.
- Trained the system with about 30,000 data samples using cascade classifiers and achieved over 85% detection accuracy.
- Integrated a module to alert lifeguards by sending them the missing person's location and tracked route.

PROJECTS

AI Customer Service Chatbot (Cloud Computing: AWS Lambda, API Gateway, Cognito, S3, Lex, SQS, DynamoDB, SNS) **Fall 2018**

- Developed scalable conversational dialog engine that recommends restaurants to users based on their location and preferences.
- Employed lambda function with Lex to generate responses and used API Gateway as interface connecting frontend hosted in S3.
- Ensured scalability by integrating event driven lambda that fetches suggestions from Yelp API and pushes them to SQS queue.
- Triggered another lambda function in a timely manner to retrieve suggestions from SQS and provide them to user using SNS.

Event Finder – Search Nearby Events (Backend Development: Node.js, Express, RESTful APIs, NeDB, D3.js) **Summer 2018**

- Built an API endpoint to get local events that in turn fetches data by hitting an external API using basic authentication.
- Implemented authentication module and created a middleware function to authorize users' API requests.

Music Analytics & Genre Recognition (Big Data Analytics: PySpark, Scala, MLlib, AWS) **Spring 2018**

- Built pipeline to extract song metadata from two web sources, transform and aggregate multiple h5 files into CSV files.
- Carried out data cleaning and integrated both datasets on Amazon EMR for analyzing trends over the years.
- Employed random forest classifier to recognize genre using features such as valence, acousticness, liveness, danceability, etc.

Sense.Me – Monitoring Mental Health using Smartphone Data (Data Science: Python, scikit-learn) **Fall 2017**

- Analyzed behavioral changes to interpret relationship between smartphone data and student's mental health state.
- Trained a Lasso Regression model to estimate possible level of depression and stress in students.

PUBLICATIONS

- A. Sen, D. Popat, H. Shah, P. Kuwor, and E. Johri: Music Playlist Generation Using Facial Expression Analysis and Task Extraction. Intelligent Communication and Computational Technologies, Lecture Notes in Networks and Systems, Springer, October 2017.