Madhur Biyani

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EDUCATION

New York University, Brooklyn, NY   *May 2020*
Master of Science in Computer Science, **GPA**: 3.61/ 4.0
- **Relevant Coursework**: Artificial Intelligence, Machine Learning, Data Science, Computer Vision
- **Honors**: Merit-Based Graduate Scholarship Awarded by NYU

University of Pune, Pune, India   *June 2017*
Bachelor of Engineering in Computer Engineering, **GPA**: 8.7/10
- **Relevant Coursework**: Database Management System, Probability and Statistics, Algorithm Design and Analysis

SKILLS

Programming Languages: Python, Java, PHP, C++, Scala, Shell Scripting
Libraries: NumPy, Pandas, Sci-kit Learn, OpenCV, Matplotlib
Technologies and Tools: Apache Spark, Hadoop, AWS, Django, TensorFlow, PostgreSQL, Firebase, MSSQL Server, Android Studio, Git, Tableau

PROFESSIONAL EXPERIENCE

Software Engineer, **Cognizant,** Pune, India   *Jan. 18- Aug. 18*
- Collaborated with a team to develop a task management system using C# and MSSQL Server.
- Integrated structured data using in-house ETL tools to create a pipeline for the task management system.

Software and Data Engineer, **Touchmagix,** Pune, India   *July. 17- Dec. 17*
- Developed an Integration system to ingest user data from Mix panel, EC2, and wrote the data for the S3 bucket using cronjobs.
- Developed an endpoint to load data into Tableau dashboard to visualize metrics such as sales, user activity, and product support.
- Communicated with three teams to gather feedback and incorporated them into the dashboard.

ACADEMIC EXPERIENCE

Backend Developer, **NYUmHealth,** New York, NY   *May 19 - Aug. 19*
- Updated the website to Python 3 and ensured the effectiveness of the website by writing meaningful unit test cases using the Django framework; achieved over 70 % code coverage.
- Developed endpoints to fetch 10 million geoJSON data points from AWS and Google Cloud Platform and write data to the S3 bucket.

Research Assistant, **Big Data Lab,** New York, NY   *Jan. 19- May 19*
- Designed and developed an Ingestion system that transforms data to Apache Parquet and loads to the in-lab portal framework built over Apache Spark and Scala.
- Created a data preprocessing tool to transform Apache Parquet files to Evolving Graph Object.
- Developed a query-builder to support a variety of queries for Evolving graphs on Hadoop Cluster using Scala.

Research Assistant, **NYU SimSpace,** New York, NY   *Sep. 18- Dec. 18*
- Collaborated with the professor to develop a model using LiDAR points and CARLA to predict pedestrian movement.
- Developed a mobile application to automate data gathering using the mobile application development kit and Google Firebase.

PROJECTS

Compiler, New York, NY   *Jan. 2019*
- Designed a compiler from scratch utilizing recursive descent parser and LLVM in Java.
- Implemented type inference, global, and local optimization, which improved the performance by 30 percent.

Ship Detection for Optical-Satellite Images, Pune, India   *June 2016*
- Developed a Python application to integrate machine learning model with streaming image data to detect illegal vessels in the sea in near-real-time with an accuracy of 94 percent.
- Developed an ensembled Machine Learning model with SVM and deep neural network utilizing sci-kit learn, TensorFlow, Numpy and OpenCV.

ACHIEVEMENTS

- Received the second-best paper in the Image Processing domain for "*Ship Detection Using Optical Satellite Images*" at IEEE Conference, Pune,2018.
- Awarded "Best Upcoming Employee" at Touchmagix in November 2017.
- Captain of the University of Pune Team for Table Tennis (2014-2016)**.**