Vatsal Shah

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EDUCATION

New York University Tandon School of Engineering   **Brooklyn, NY**
*Master of Science in Computer Science (**GPA: 3.7/4.0**)*   *May 2019*
- **Relevant Coursework**: Data Science, Big Data, Computer Vision, Database, Data-Structure Algorithms, Programming Languages
- **Honors**: Awarded a **Merit-based Graduate Scholarship** throughout the Graduate Program from NYU.

Gujarat Technological University L. D. College of Engineering   **Ahmedabad, India**
*Bachelor of Engineering in Computer Engineering (**GPA: 8.4/10.0**)*   *April 2017*
- **Relevant Coursework**: AI & Machine Learning, Data Mining, Distributed OS, Probability & Statistics, Software Engineering
- **Honors**: Awarded Scholarship from Ministry of Human Resource Development, Govt. of India for 4 Years. Graduated among **TOP 2%** students in the Department of Computer Science and Engineering, Gujarat Technological University.

SKILLS

- **Programming Languages**: **Proficient**: Java, Python **Working Knowledge**: SQL,PHP **Familiar**: C/C++, Haskell, Kotlin, Scheme
- **Data Science Libraries (Python)**: scikit-learn, pandas, numpy, matplotlib, plotly **(Java):** Java-ML
- **Frameworks Technologies**: Java MVC, Spring Framework, Hibernate, JPA, CodeIgniter, Java Servlet, Vert.x
- **Tools/Technologies**: **Familiar:** Machine Learning (Data Science, Computer Vision), Big Data (Hadoop, Spark, PySpark) **Working Knowledge**: Web Development (HTML, CSS, JavaScript), GIT, Filezilla, Eclipse/IntelliJ IDEA
- **Relevant Knowledge**: Design Pattern, Test Framework, Software Development Life Cycle, Network Protocols, Linux OS Unix OS

CERTIFICATIONS

- **Machine Learning** course under Andrew NG by Stanford University on Coursera   *Ongoing*
- **Music Theory and Music Guitar Grade-1** by ABRSM University, London   *Nov 2014*

EXPERIENCE

Investopedia Inc.   **New York, NY**
*Software Engineer, Intern [**Kotlin – Vert.x – Vue.js**]*   *May 2016 - Oct 2016*
- Developed ETL Vertical for Mortgage Center using Vert.x and Kotlin which lowers the process time by 15% through automation.
- Constructed number of tools and widgets for Personalization Vertical using Vue.js for rendering quickens the pagespeed by 47.6%.

New York University Tandon School of Engineering   **Brooklyn, NY**
Graduate Teaching Assistant, Department of Computer Science and Engineering   *Jan 2018 - Present*
- Looking after Lab sessions, Grading as Teaching Assistant for **Programming Languages** (CS-GY 6373-A) since Spring 2018.

Augmented Reality Integrated Search Engine (A.R.I.S.E)   **Ahmedabad, India**
System Developer, Head Intern (Startup)   *Nov 2016 - Apr 2017*
- Developed an image processing system based deep learning algorithms featuring object / gesture recognition through android app.
- Integrated Augmented Reality for real world info for real time object capturing for recognition using Google OCR & Volley libraries.

Sterlite Technologies Pvt. Ltd.   **Ahmedabad, India**
*Software Engineer, Intern [**Java Spring-JPA**]*   *May 2016 - Oct 2016*
- Created an Operational & Maintenance Utility ERP system over public WiFi system to enable clients to analyze the healthy system.
- Developed Centralized Virtual Network for various peer networks interaction of multiple clients for dynamically automated tasks.

PROJECTS

Crime Data Analysis   *Jan 2018 - May 2018*
- Cleaned and Processed Crime Data of NYC, Chicago and LA by leveraging **Big Data** tools like **Spark, Hadoop, and MapReduce**. Analyzed data to develop Insights which were evident with Visualization and Statistic affirmation. Discovered the Co-relation between Weather Parameters, Demographics, Gentrification, and Governmental Budget Expenditures.

Environment Detection for Autonomous Smart Car using Computer Vision   *Apr 2018 - May 2018*
- Using the **Computer Vision** and **Image Processing** Techniques and Algorithms to help the Autonomous Smart Cars to for Environment Detection for Real Time Lane Detection and Signal Signage Detection using manually implemented algorithms like **Probabilistic Hough Transform**, **Template Matching**, Color Space Transformation, and Smart Selection of Region of Interest.

Healthcare Intelligence System Using Data Mining   *Dec 2016 - Mar 2017*
- Developed Data Analytics System, by implementing 4 ML algorithms giving higher accuracy than Java Libraries, by incorporating US govt. data. Leveraging **Java Spring JPA/Hibernate** and **Android** to track user's routines and warned users against potential diseases they might suffer from. Integrated near-by medical stores and blood-donor locator according to users' specifications.