Siddhant Shah

+1(857)-437-9424 | shah.sid@northeastern.edu | /thesidshah | /thesidshah

Education

Khoury College of Computer Sciences, Northeastern University — Boston, MA
Master's of Science in Computer Science — *May 2023*

NBN Sinhagad School Of Engineering, Pune University — Pune, IN
Bachelor's of Engineering in Computer Engineering — *May 2020*

Technical Skills

Languages: Java, Python, SQL (MySQL), JavaScript, HTML/CSS, Spark
Frameworks: React, Node.js, JUnit, Selenium
Libraries: Pytorch, Pandas, NumPy, Matplotlib, jQuery, React, Bootstrap, OpenCV, Gensim

Experience

Software Associate Engineer — Dec. 2020 – Aug. 2021
Globant Pvt Ltd — *Pune, IN*

- Created an instance of ServiceNow to make a unified platform for the company to streamline work and gather insights from operations across the world, named 'The Global Enhancement Project'.
- The initiative *saved an approximate 250+ man-hours* of effort and enabled the leadership to have a detailed view of live progress and integrated with PowerBI the project enhanced user experience, increasing viewership by at least 20%.
- Employed practices such as Rapid Deployment, and Scrum-based Agile methodology to create 50+ ServiceNow based dashboards, customized forms.

Research Intern — Sep. 2019 – Feb. 2020
Visava Labs (Delta Interiors Pvt Ltd) — *Pune, IN*

- Developed an expert-based system in Java that generates 100+ possible configurations for each input.
- Lead the team's research in **Generative Adversarial Networks** (*GANs*) and its application to *3D floor plan generation* at the intersection of Architecture and Technology, adapted it to practical implementation.
- Designed an **Android application** that accepts various input constraints such as budget, area, etc, and displays a detailed list of material required based on the location, 2D, and 3D floor plans.
- **Secured** the startup's first round of (80%) **funding**.

ML Intern — Aug. 2019 - Dec. 2019
IotIot.in — *Pune, IN*

- Conducted experiments with Convolutional Neural Networks (CNNs) to create a facial recoginition system that is cost efficient and requires as less as 15 data points of the face.
- Used TensorFlow, Keras, NumPy and other libraries based in Python and interfaced it with the startup's ShunyaOS on Raspberry Pi, reached accuracy levels of about 91%.

Recent Projects

Topic Modeling and Extractive Summarization | *NLTK, Scikit-learn, Numpy, Gensim* — Dec.2022

- Used Non-negative Matrix Factorization, Truncated Singular Value Decomposition, Latent Dirichlet Allocation for generating top k relevant words and text summaries with rouge scores ~ 0.3.
- Normalized 1000+ text documents using Regex (re), Count Vectorizer, Term Frequency - Inverse Document Frequency (TFIDF) from sklearn library.

Image convolutions | *Python, Numpy, OpenCV, Matplotlib* — Jul. 2022

- Developed a framework to apply image operations such as filtering from scratch using NumPy.
- Dynamically detect and remove borders and outliers of the Harris map usually at the edges of images.
- Links to all code snippets can be found on gists @ github. Part of a blog available on Medium.com.

Bird Strikes in the 2000s | *R, XML, MySQL, SQLite* — Jun. 2022

- Sped up the program execution for reading and transforming data from a file using aggregates and other file reading hacks from about three hours to a few fifteen minutes [Extract].
- A database schema adhering to 3NF, extracted data from text documents and XML files, created a formatted CSV file after transforming it using R packages: tidyR, ggplot, dplyr [Transform].
- Finally, implemented the schema in MySQL and SQLite, uploaded the data using scripts, created recursive queries, stored procedures, and finally fetched as well as displayed the results using graphs [Load].

Publications

- Shah, *et. al*, **An Intuitive Study: Intrusion Detection Systems and Anomalies, How AI can be used as a tool to enable the majority, in 5G era**, IEEE
- Shah, *et. al*, **A Study of Generative Adversarial Networks in 3D Modelling**,Dec 2019, Vol6:Issue-12 IRJET

Updated: February 2023