### **NEIL SHAH**

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#### **SUMMARY**

MS Student in Computer Science at Illinois Tech, received the Graduate Pathway Scholarship of 10,000 USD. Finished three internships where I led the team in building company's website using JavaScript, pioneered an entire project in Application Development and build strong foundations for Python. Author of two original papers based on Artificial Intelligence with over 30 citations. Hands-on experience with executing industry related projects in Machine Learning (Computer Vision and Natural Language Processing) and Full-Stack domain. Looking to use my strong leadership, debugging, and coding skills, as well as my understanding of how to manage time and expectations for this internship.

### **EDUCATION**

Master of Science in Computer Science | Illinois Institute of Technology, Chicago | GPA: 3.67.

Jan 2022-Dec 2023

Bachelor of Engineering in Computer Engineering | GTU, Ahmedabad | GPA: 3.71.

Aug 2017-Aug 2021

## **SKILLS**

Programming Language and Libraries: Python, SQL, NumPy, Scikit-learn, TensorFlow, Java, Angular JS, and React JS

**Tools and Frameworks**: Git (GitHub), bit-bucket, Jupyter Notebook, Hadoop, AWS, SQL Server Management Studio, Google suites, and Android Studio.

**Soft Skills**: Communication Skills, Time Management Skills, Analytical Thinking, Flexibility, Adaptability, Problem Solving and Leadership.

## **WORK EXPERIENCE**

## **Programming Intern at Alept Consulting Private Limited**

Jul 2021-Aug 2021

- Increased skills in JavaScript, jQuery and React JS by researching, investigating and fixing a wide range of technical issues.
- Focused on building company's website <a href="https://alept.com/">https://alept.com/</a> and produced it dynamically responsive by employing React.

#### Python Internship at Arihant AI

May 2021-Jul 2021

- Profitably integrated QuickBooks API service into ERP system, allowing for automated data transfer between the two systems.
- Successfully coordinated and expedited ongoing projects to make web applications more efficient, which included data scraping from APIs and operating it in JSON format, resulting in a 10% increase in productivity.
- Led the development of multiple platform (iOS and Android) mobile applications for Geo-Fencing Attendance Manager.
- Made use of Android Maps SDK to construct an attendance application where employees receive notifications upon entering or exiting a 50-meter radius circle with workplace as center.

#### Python Internship at CME Expertise Infotech.

Jan 2021-Mar 2021

- Taught myself Python and applied it to live projects, resulting in code that ran faster and was more reliable.
- Understood and helped in building client-server systems.

#### **PROJECTS**

Sentiment Analysis

Nov 2022-Dec 2022

- Database was composed by the entire class. Evaluated the annotator agreement and streamlined the dataset by eradicating annotator scores, less than 0.2.
- Partitioned the datasets and trained a baseline model employing count vectorizer and logistic regression to achieve 83% accuracy.
- Remodeled and upgraded through feature engineering, by employing lemmatization, regular expression and defined unique words. This resulted with an increase of accuracy to 87%.

### Image Captioning with CNN and RNN

Jan 2022-Mar 2022

- Developed a Recurrent Neural Network by utilizing deep learning to compare a target image to a vast collection of training photos and provided an accurate description applying taught captions.
- Optimized and tweaked the built model to enhance accuracy from 30% to 34%, with a BLEU 1 score of 54%. Test cases were created to calculate system accuracy using Flickr 8k and Flickr 30k datasets, having over 30,000 photos.

#### **Fake News Classification**

Jan 2022-Mar 2022

- Prepared a Siamese Network with two inputs, categorizing an incoming item of news in comparison to previously presented material into one of three categories: agreed, disagreed and unrelated.
- Achieved an accuracy of 98.56% by setting activation function as SoftMax and benefiting from categorical cross entropy.

### GarageOpedia

Jan 2021-Jul 2021

- Employed a comparison module to check pricing of repair services, as well as search for Garages in vicinity, whether urban or rural, and schedule a service.
- Created it in Android Studio and Google Maps SDK. Devised an SQLite database where information of customer (app user) and garage owner is stored.

#### PUBLISHED PAPERS

Crime Forecasting: A machine learning and computer vision approach to Crime Prediction and Prevention. (Lead Author)

• Publication - Springer, Visual Computing for Industry, Biomedicine, and Art | April 2021 | 39,000 Access and 10 Citations | Second most accessed paper in the journal.

# Research Trends on the Usage of Machine Learning and Artificial Intelligence in Advertising. (Lead Author)

Publication - Springer, Augmented Human Research | Nov 2020 | 2477 Access and 20 Citations.

# ORGANIZATIONS AND EXTRACURRICULAR

Treasurer at Union Board | Biggest Student Organization conducting every major event in the University.

Advancement Ambassador and Student Assistant at Advancement Office and Office of Campus Life of Illinois Institute Technology of Chicago.