

# Vama Shah

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## TECHNICAL SKILLS

**Languages:** Python, Java, SQL, C/C++, JavaScript, Matlab, Angular

**Database:** MySQL, Oracle DB, MongoDB

**Analytical:** Machine Learning, Artificial Intelligence, NLP, Data Structures and Algorithms

**Tools:** ThreeJS, BitBucket, Jira, GitHub, Jupyter Notebook

**Libraries:** PyTorch, Numpy, SciPy, Tensorflow, Pandas, Scikit-learn

## EDUCATION

**Rochester Institute of Technology, Rochester, NY**

Aug 2020 - May 2023

Master of Science, *Computer Science* **GPA: 3.5/4.0**

**Relevant coursework** – Object-Oriented Programming Concepts– Java, Intro to Big Data, Intro to Machine Learning, Foundations of Artificial Intelligence, Data Structures and Algorithms, Big Data Analytics, Information Text and Retrieval

**K. J. Somaiya College of Engineering, University of Mumbai, India**

Aug 2015 - May 2019

Bachelor of Technology, *Electronics and Telecommunication Engineering* **GPA: 7.34/10**

## PROFESSIONAL WORK EXPERIENCE

**Software Development Engineer Intern**

Jan 2022- Present

**MINDEX Technologies Inc., Rochester, NY**

- Responsible for developing and testing software with **90%** code coverage to process company tax information from **23 states** and reduce tax burden for the companies by **66%**.
- Proposed requirement for priority status of incoming files and implemented it to increase processing speed by **80%**
- Developed new modules and enhanced existing ones to design flow-based solutions between UI and Mongo Database for client **Paychex** based on **Agile** methodology
- Technologies used- **Java 6 and 8, Spring Framework, Gradle, Maven, Jenkins, AngularJS, TypeScript**

**Assistant Systems Engineer**

Nov 2019 – Dec 2020

**TATA CONSULTANCY SERVICES (TCS), Mumbai, India**

- Worked on development of in-house Data Science Platform for client
- In-charge of onboarding **80+ users** and developing Python scripts to automate user-access to the platform
- Focused on automating specific project requirements to use the platform which included automating the creation of virtual environments with the required set of packages which reduced set-up time by **95%**
- Technologies used- **Python, Django, SQL**

**Student Lab Instructor, Grader**

Aug 2021- Dec 2021

**Rochester Institute of Technology, Rochester, NY**

- Responsible for holding mentoring hours and Problem Solving Sessions for Graduate Level Course- Computational Problem Solving using Python for **30+ students**
- Grader for Graduate and Undergraduate Level Course - Advanced Programming Skills for **30+ students**

## PROJECTS

**Topic Modelling for Olympic and Fashion News** <https://github.com/vama-rit/Topic-Modelling-for-Olympic-and-Fashion-News>

Sept 2021

- Identified distinct topics occurring in large sets of documents based on the frequency of words present in them
- Used LDA model to perform modelling and measured the performance using coherence and perplexity
- Identified topics after data cleaning and data pre-processing with 89% accuracy

**Binary Classifier using PyTorch**

Sept 2021

- Created a binary classifier using PyTorch to implement a single logistic regressor
- Obtained decision boundary using the classifier to visualize class regions with classification accuracy of 98%

**Optimal Path Generation for Orienteering**

Feb 2021

- Found the shortest path between two coordinates on a 3D map by performing the A\* search algorithm which is 40% faster than any naïve search algorithm
- Considered optimal path for orienteering considering different types of terrain and elevations thus improving performance by 20%

**ASL Gesture Recognition and Conversion from text to speech**

Jan 2019

- Built and trained a Convolutional Neural Network to recognize hand gestures with 94% accuracy
- Employed image processing techniques to filter incoming hand images and make them easier to train on/get recognized by the neural network. Technologies used- **TensorFlow, Keras, Python, CNN**

## HACKATHONS

**Neighborhood Evacuation WebApp-** <https://devpost.com/software/neighborhood-evacuation>

Spring 2022

*BrickHacks 2022*

- Developed a web app that allows users to post location determining availability of shelter, supplies or transport
- Technologies used- **Python, Django web framework, Cloud services and APIs**

**EmployeeFit Productivity Tool-** <https://devpost.com/software/employeefit>

Spring 2022

*WicHacks 2022*

- Implemented a decision tree machine learning algorithm to determine work preference of work from home or office and obtained a 76% accuracy for determination of work preference
- Technologies used- **Python, Mental Health of Employees dataset from Kaggle**