

## EDUCATION

- Master of Science (M.S.) in Computer Science and Engineering** (GPA: 3.75/4.00) (Aug '21 – expected Dec '22)  
University at Buffalo, State University of New York
- Bachelor of Technology (B.Tech.) in Electronics Engineering** (CGPA: 8.96/10.00) (Aug '17 – May '21)  
Sardar Patel Institute of Technology (S.P.I.T.), Mumbai.

## PROJECTS & PUBLICATIONS

- MNIST Digits Classification — Introduction to Pattern Recognition course project.** (Aug '21 – Dec '21)
- Implemented Symmetric Cross Entropy Learning (SL) and Label-Distribution-Aware-Margin Deferred ReWeighting (LDAM-DRW) models with accuracy up to 98% for ensuring robustness with data with symmetric and asymmetric noise.
- Stanford's Pintos Operating System — Introduction to Operating Systems course project.** (Aug '21 – Dec '21)
- Implemented priority scheduling, priority donation and MLFQS for kernel threads; Implemented support for user programs by implementation of virtual memory and system calls.
- Fake Review Detection — Senior year college project.** (Aug '20 – May '21)
- Used natural language processing to create a machine learning model that detects fake reviews and filters them out before being posted with a special focus on precision; obtained about 88% accuracy and precision.
  - Resulting publication:* J. Bhopale, R. Bhise, A. Mane and K. Talele, "A Review-and-Reviewer based approach for Fake Review Detection," 2021 Fourth IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), pp. 1-6, doi: 10.1109/ICECCT52121.2021.9616697.
- Speaker Diarization and Transcription — Junior year college project.** (Jan '20 – May '20)
- Reviewed research papers related to speaker recognition and developed an application to implement speaker diarization for different speakers in a group, meeting, etc. to further produce a transcript of their conversation.
  - Resulting publication:* A. Mane, J. Bhopale, R. Motghare and P. Chimurkar, "An Overview of Speaker Recognition and Implementation of Speaker Diarization with Transcription," *International Journal of Computer Applications*, vol. 175, no. 31, pp. 1-6, November 2020. doi: 10.5120/ijca2020920867.
- IoT based Food Ordering System — Junior year college project.** (Aug '19 – Nov '19)
- Designed an on-table device for customers to order meals that'll be directly communicated into the kitchen over Wi-Fi, thus attempting to automate the food ordering system in restaurants and food courts.
  - Resulting publication:* A. Mane, J. Bhopale, R. Jain and P. Chimurkar, "A Low-Cost Implementation of an IoT based Food Ordering System," *Grenze International Journal of Engineering and Technology*, vol. 6, issue 2, pp. 123–128, July 2020.

## CERTIFICATIONS

- Deep Learning** — Deeplearning.ai, via Coursera.
- Applied Data Science with Python** — University of Michigan, via Coursera.
- Mathematics for Machine Learning** — Imperial College London, via Coursera.
- Data Science** — Johns Hopkins University, via Coursera.

## SKILLS

- Programming:** Python, Java, JavaScript, C, C++, SQL, R, MATLAB, HTML
- Technologies:** PyTorch, TensorFlow, Keras, OpenCV, NLTK, Node.js, Docker, AWS, Git
- Databases:** Postgres (PostgreSQL), MongoDB (NoSQL), MySQL
- Areas of expertise:** Machine Learning, Deep Learning, Computer Vision, Reinforcement Learning, Artificial Intelligence

## EXTRACURRICULAR ACTIVITIES

- Worked as a Teaching Assistant for the class "Computer and Communication Networks", of 70 students, under Dr. Deepak Karia (HoD – Electronics Engineering, S.P.I.T.) (Jan '21 – May '21)
- Served as the Student Coordinator for Abhyudaya (an NGO educating underprivileged kids) and taught Science and Mathematics to a class of 40 9<sup>th</sup> and 10<sup>th</sup> grade students every Sunday. (Sep '17 – May '21)
- Coordinated with companies as the Department Coordinator of Industry Relations committee, S.P.I.T. (Oct '17 – May '20)
- Handled institute's research resources as member of the Institute's Innovation Council (IIC), S.P.I.T. (Aug '19 – May '20)
- Led a team of 4 in IIT-Bombay's e-Yantra Robotics Competition – qualified for semi-finals. (Oct '18 – Feb '19)