



## EDUCATION

### Master of Science in Computer Science

Arizona State University, Tempe, AZ

May 2021

3.74/4 GPA

**RELEVANT COURSEWORK-** Knowledge Representation, Data Mining, Social Media Mining, Distributed Database Systems, Data Visualization, Statistical Machine Learning, Artificial Intelligence, Systems Design for ML.

### Bachelor of Engineering in Engineering

Savitribai Phule Pune University, Pune, India

May 2019

8.82/10 GPA

**RELEVANT COURSEWORK-** Machine Learning, Data Mining and Warehousing, Data Analysis, Advanced Data Structures.

## TECHNICAL SKILLS

- **Programming:** Python, R, Java, C#, C++, C, Clingo (ASP), JavaScript, HTML5, CSS, Bootstrap
- **Frameworks:** PyTorch, Scikit-Learn, SciPy, Keras, NLTK, Seaborn, Matplotlib, Plotly, TensorFlow, D3.js
- **Technologies:** AWS, Tableau, Android, WordPress, Git
- **Databases:** MySQL, PostgreSQL, Oracle, MongoDB

## ACADEMIC PROJECTS

### Understanding Machine vs Human Generated Text

Fall 2020

- Engineered a model to extract **statistical measures of the language distribution** and incorporate them as features for classification using **bag of words** and **n-gram** techniques to classify human vs machine generated text in **Python**.
- Evaluated the classifier on LIAR and TweepFake datasets with **83.2%** and **78%** classification accuracy, respectively.

### Emotion Detection using Federated Learning

Spring 2020

- Developed an emotion detection algorithm to eliminate privacy concerns of a user using federated learning utilizing **VGG-19, federated averaging & encryption methodologies** to achieve in **75%** accuracy using **PyTorch - Python**.
- Tested the algorithm on different edge devices on **multiple datasets** such as JAFFE, FER, FER-2013 & FacesDB.

### Lifelong Planning Pac-Man

Spring 2020

- Programmed an optimal lifelong planning algorithm for Pac-Man using **A\*, A\* lifelong & D\* lite algorithms** in **Python**.
- Constructed a **comparative report** on all the algorithms based on achieved scores, expanded nodes & execution time.

### Feature Engineering on CGM Time Series

Spring 2020

- Performed **data preprocessing, feature extraction, validation, verification** and **PCA** on raw CGM time series data signifying glucose levels of different patients on meal intakes using **Python**.
- Applied a sliding window on the data and performed **data visualization** resulting in **81%** prediction accuracy.

### Information Dissemination in a Graph

Fall 2019

- Implemented information dissemination to observe the propagation of an entity like a meme or a virus using **Python**.
- Integrated the algorithms (**NetShield, K-Edge addition & deletion**) into an ensemble system to maximize or minimize information spread through a network which can be further utilized to stop a virus or spread information on the web.

## PROFESSIONAL EXPERIENCE

### Arizona State University: USA | Web Developer

Dec 2019 – Present

- Developed, redesigned, and managed Arizona State University websites from scratch using **WordPress, HTML & CSS**.
- Assisted students & faculty with **debugging their codes** along with other IT related **hardware and software issues**.

### InProspect Technologies: India | Android Developer (Intern)

Jun 2018 – Aug 2018

- Led the **UI & UX Design** team on **Material Design** schematics for building an education eccentric android application.
- Administered **User Analytics**, Front-end & Back-end app development using **Python & Java for Android**.

### A.B. Enterprises: India | Software Engineer (Intern)

April 2017 – March 2018

- Implemented & deployed a **Stock Management & Sale Analysis** Software using **Java, Python, MySQL & MongoDB**.
- Constructed a local **cloud server** for inhouse technical management resulting in **20% increased work productivity**.