



EDUCATION

Master of Science in Computer Science

Arizona State University, Tempe, AZ

May 2021

3.67/4 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 Computer Science and 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, HTML, CSS, Bootstrap
- **Frameworks:** NumPy, PyTorch, Scikit-Learn, SciPy, Keras, Pandas, Seaborn, Matplotlib, Plotly, TensorFlow, OpenCV
- **Technologies:** AWS, Tableau, Android, WordPress, Git
- **Databases:** MySQL, Oracle, MongoDB

ACADEMIC PROJECTS

Emotion Detection using Federated Learning

Spring 2020

- Developed an Emotion Detection algorithm using Federated Learning which used **VGG-19, federated averaging & encryption methodologies** with **75%** accuracy & eliminating privacy concerns of a user with **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.

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 used to stop a virus or spread information on the web.

Software Development for Laser Marking Machines

Fall 2018 - Spring 2019

- Assembled 3 modules: Automation of laser marking jobs, camera orientation & image correction, & real-time error detection into a desktop software for automating the laser marking machines.
- Engineered the software using **C#, Java, VS19, Python** & also published a paper in an *International Journal (IJIRSET)*.

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 **visualization** resulting in **81% prediction accuracy**.

PROFESSIONAL EXPERIENCE

Arizona State University: USA | Web Developer

Dec 2019 – Present

- Developed and redesigned 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**.