# ANISH OSWAL

+1(480)-937-7592
anishoswal@gmail.com
www.linkedin.com/in/anishoswal
www.github.com/anishoswal
anishoswal.me

#### **EDUCATION**

## **Master of Science in Computer Science**

Arizona State University, Tempe, AZ

(Expected) 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**

May 2019

Savitribai Phule Pune University, Pune, India

8.82/10 CGPA

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

# PROFESSIONAL EXPERIENCE

# Web Developer/ Desktop Support Assistant | Arizona State University

Dec 2019 - Present

- Developed Arizona State University websites using WordPress, HTML and CSS.
- Assisted students & faculty with **debugging their codes** along with other IT related **hardware and software issues**.
- Managed computer equipment, unboxing & setting up new computers and inventory for the university.

# Android Developer (Intern) | InProspect Technologies

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.

# **Software Engineer (Intern) | A.B. Enterprises**

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.

## **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, FERG, 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 marking jobs, camera orientation & image correction, & real-time error
detection into a desktop software for automating the laser marking machines using C#, Java, VS19, Python.

## Sentiment Analysis

Winter 2018

• Modeled an all-purpose sentiment analysis program with 85% accuracy on datasets like twitter & reddit using Python.

#### **EXTRA-CURRICULAR**

Helped organizing multiple national level workshops & events related to computer science & entrepreneurship as an
active member of Computer Society of India (CSI) and Entrepreneurship Development Cell, VIIT respectively.