

# PARTH VAIBHAV PANSE

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## EDUCATION

### Master of Science, Computer Science

Arizona State University, Tempe, AZ

Expected May 2025

3.67 GPA

Relevant coursework: Cloud Computing, Statistical Machine Learning, Data Visualization

### Bachelor of Engineering, Computer Science

Savitribai Phule Pune University, Pune, India

July 2023

3.52 GPA

Relevant coursework: Machine Learning, Data Science and Big Data Analytics, Artificial Intelligence

## TECHNICAL SKILLS

**Languages:** Python, C, C++, Java, SQL, Go, HTML, CSS, JS

**Frameworks:** Django, ReactJS, Angular, NodeJS, ExpressJS, Selenium, Flask, .NET

**Machine Learning:** Scikit-Learn, PyTorch, Keras, TensorFlow

**Tools and Technologies:** AWS, EC2, S3, SQS, SimpleDB, Git, Kubernetes, MySQL, MongoDB, Power BI

## PROFESSIONAL EXPERIENCE

### Oytie Pvt. Ltd, Pune, India: Software Engineer Intern

February 2022 - May 2022

- Led a team of **12 developers** to design and implement a CRM web application using **Django and React**, integrating **PostgreSQL** for data management, resulting in a **10% improvement** in user retention.
- Optimized **25+ RESTful APIs** using **Django REST Framework**, diminishing average response times by **40%** and elevating system scalability to handle **100,00+ user** interactions per day.
- Implemented containerized workflows with **Docker** and automated **CI/CD** pipelines via GitHub actions, cutting deployment times by **30%** and eliminating manual errors by **90%**.
- Executed **200+** automated tests through **Pytest**, increasing software reliability by **35%** and maintaining **99.9% uptime** post-deployment.
- Managed **Agile development** cycles using Jira, overseeing sprint planning and backlog refinement, leading to a **25%** increase in team efficiency and a **20%** faster release cycle.

## ACADEMIC PROJECTS

### Scalable Face Recognition System on AWS

January 2025 - March 2025

- Cut down latency from **3s to 1.8s** in a multi-tier AWS cloud application by optimizing auto-scaling and load balancing through EC2, S3, and SQS, while maintaining **99%** accuracy in face recognition.
- Built a scalable face recognition system on AWS, securing **0.116s** response time for **1000** requests and dynamically scaling to 15 EC2 instances, ensuring efficient resource utilization and cost savings.

### Analysis of Arizona Businesses using Yelp Dataset

August 2024 - December 2024

- Performed large-scale data analysis on Yelp's Arizona business dataset containing **7,000,000 entries**, leveraging **PySpark** and **Spark SQL** to extract insights on customer engagement, review trends, and business performance.
- Created interactive visualizations using **Matplotlib** and **Seaborn**, uncovering **20+** patterns in user behavior, sentiment trends, and the impact of elite reviewers on business success.

### Image Denoising Using Convolutional Neural Networks

August 2023 - December 2023

- Developed an Image Denoising model using **CNNs and Stable Diffusion** principles, improving image clarity by **30%** through noise reduction techniques.
- Enhanced object recognition in medical imaging and autonomous vehicles, increasing application performance by **20%** with elevated dataset augmentation.

### Study Room Recommendation System

January 2023 - May 2023

- Designed a **MEAN Stack**-based Virtual Study Environment, enabling **1,000+ users** to collaborate, increasing engagement by **40%** and learning efficiency by **30%**.
- Integrated a K-Nearest Neighbors recommendation system with **91% accuracy**, maximizing study room personalization and boosting platform retention by **35%**.

### SharkPhish

January 2023 - May 2023

- Deployed a phishing detection web application using a **Random Forest algorithm**, attaining **97.47%** accuracy and reducing false positives to **0.03%**, significantly enhancing cybersecurity for users.
- Developed a feature extraction pipeline analyzing **20** critical website features, achieving **97.88%** precision and creating an intuitive interface for seamless integration into existing security systems, empowering users to make informed safety decisions.