# PARTH VAIBHAV PANSE

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#### **EDUCATION**

Master of Science, Computer Science
Arizona State University, Tempe, AZ

May 2025
3.63 GPA

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

Bachelor of Engineering, Computer Science
Savitribai Phule Pune University, Pune, India
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, JavaScript

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

- Collaborated with a team of 12 interns 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 10,000+ 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.
- Conducted rigorous code reviews and peer programming sessions to uphold **coding standards**, enhance team collaboration, and reduce post-deployment bugs by **25**%.

## ACADEMIC PROJECTS

## Scalable Face Recognition System on AWS

March 2025 - May 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.

#### Automated Brochure Generator with GPT-4 and Web Scraping

Jan 2025 - March 2025

- Developed a full-stack MERN application using React.js, Node.js, and MongoDB that leverages GPT-4 and web scraping to automatically generate professional company brochures, reducing manual content creation time by 80%.
- Engineered a microservices architecture with Python and Express.js, implementing RESTful APIs, user authentication, and a responsive Material-UI frontend, achieving 95% accuracy in content extraction and analysis.

## Analysis of Arizona Businesses using Yelp Dataset

August 2024 - December 2024

- Analyzed **7M**+ **entries** from Yelp's Arizona dataset using **PySpark** and **Spark SQL** to uncover trends in customer engagement, reviews, and business performance.
- Visualized **20**+ **patterns** using **Matplotlib** and **Seaborn**, highlighting elite reviewer influence and providing actionable recommendations for engagement improvement.

## Image Denoising Using Convolutional Neural Networks

August 2023 - December 2023

- Developed a **CNN-based** denoising model using **U-Net**, improving clarity of noisy CIFAR-10 images—applicable in medical imaging, autonomous vehicles, and ML data augmentation.
- Achieved stable convergence at **0.0154 MAE loss** using adaptive learning rate scheduling, enabling progressive noise reduction across **100+ training iterations**.

# SharkPhish

January 2023 - May 2023

- Deployed a phishing URL detection app using a Random Forest model with 97.47% accuracy and only 0.03% false positives, improving user cybersecurity awareness.
- Engineered a feature extraction pipeline analyzing 20+ key indicators, achieving 97.88% precision and providing an intuitive interface for seamless integration.