# Prathamesh Bamb

# Pune, Maharashtra, India - 411033

#### Education

## Dr. Dy Patil International University

Aug 2021 – June 2024

Bachelor Of Computer Engineering

Pune, Maharashtra

Trade: Artificial Intelligence and Machine Learning (AI & ML)

### Pimpri Chinchwad Polytechnic

Aug 2018 – June 2021

Pune, Maharashtra

Diploma Of Computer Engineering

# Core Competencies

- UI/UX Development: Html 5, CSS, JavaScript.
- Programming Languages: Python, SQL.
- Frameworks: Tensor Flow, Flask, Django, Bootstrap.
- Tools: Git, GitHub, MySQL Workbench, Generative AI, Jupyter Notebook, MS Excel.
- Domain Knowledge: Machine Learning, Cloud Computing, Data Analytics, Data Visualization, Business Intelligence.
- Soft Skills: Analytical Storytelling, Empathetic Collaboration, Curiosity-Driven Exploration, Strategic Decisions.

# Work Experience

# Dr. Dy Patil International University (In-House Internship)

May 2023 - July 2023

Research Intern

Pune, Maharashtra

- Task: Developed the 'Blood Bank Management System," a comprehensive software solution for donor registration, blood inventory tracking, and blood type matching, streamlining operations and reducing processing time by 40%.
- $\bullet$  Optimized scheduling, storage, and access systems for blood supplies, reducing retrieval times by 30% and enhancing operational efficiency to support critical life-saving medical procedures.

### Vowtech Technologies Pvt. Ltd.

August 2023 - January 2024

Web Developer Intern

 $Pune,\ Maharashtra$ 

- Task: Engineered a fully functional E-commerce platform with HTML, CSS, JavaScript, Bootstrap, Python, and Django, achieved a 50% reduction in page load times, resulting in a 25% boost in user engagement.
- Worked with a supportive team and I reinforced my passion for Web Development and gained valuable insights into project management and teamwork.
- Achievement: Published a research paper in reputable international journal.

#### Showcase Projects

## Quantum Machine Learning for Image Classification

- <u>Project Description:</u> Created and implemented Quantum Convolutional Neural Networks (QCNN) algorithms for image classification on quantum computers, achieving a 25% increase in classification accuracy and enhancing processing efficiency by 30%.
- Quantum Convolutional Neural Networks (QCNNs) are at the forefront of integrating quantum computing with machine learning, aiming to revolutionize image classification.
- This cutting-edge technology represents a significant step towards the future of quantum-enhanced artificial intelligence.

## AI Based Chatbot Development

- <u>Project Description:</u> Developed an AI-based chatbot leveraging advanced machine learning models. Built the chatbot using the FLAN T5 model and Open Orca dataset, enhancing its ability to manage complex user interactions.
- Fine-Tuned & Optimized model through quantization, distillation, and pruning techniques to improve performance and reduce resource consumption.
- Used Metrics for Evaluation through Response Time & Accuracy, assessed using precision, recall, and F1 score.
- Designed a user-friendly interface with Gradio and deployed the solution on Hugging Face Spaces.

#### Leadership / Extracurricular

#### Student Council

School of Computer Science Engineering & Applications

- Executed a series of events including workshops and seminars, achieving a rise in student engagement and continually refining activities through systematic feedback collection and strategic adjustments.
- Conducted a thorough evaluation of participant feedback, leading to the introduction of engaging workshops and networking opportunities; these initiatives resulted in a 25% improvement in attendee retention rates at future events.