# Abdul Kadir Nalawala

Ajab Villa, Godi Road, Dahod, India - 389151

#### Education

#### Sarvajanik College of Engineering and Technology, Surat

August 2021 - May 2025

Bachelor of Tehenology in Computer Engineering

CGPA: 9.08 (upto 7<sup>th</sup> semester)

## Experience

Vertexco Lab — Generative AI Intern

May 2024 - July 2024

- Developed a **Python package** leveraging **Selenium WebDriver** to interact with the ChatGPT web interface.
- Integrated official OpenAI Python library for comprehensive ChatGPT interaction capabilities.

#### **Publications**

SmileSculpt: Sculpting Smiles Digitally — Best Paper Presentation Award — Scopus Index International Conference on Recent Trends in Image Processing & Pattern Recognition

December 2024

## Projects

Sumsum — Python, Python Package, Open Source Q

- Developed a minimal command-line interface (CLI) tool named sumsum to locally summarize text using a Large Language Model (LLM).
- Fine-tuned Llama3.2-3B-Instruct on Longform article summarization dataset.
- Implemented features such as dependency checks, model downloads, and verbose output for **enhanced user experience**.

## Bishograd — Python, Python Package, Open Source Q

- Built a custom **Autograd engine** for Machine Learning tasks.
- Implemented core auto-differentiation functionality, including forward and backward passes, enabling efficient gradient computation for various mathematical operations.
- Incorporated advanced mathematical functions such as tanh, ReLU, and exponential, expanding the engine's capabilities for complex neural network architectures.

## Codebase Analyzer — Python, OpenAI •

- Designed a CLI tool to analyze any GitHub repository using ChatGPT LLM for code improvements, bug fixes, and
- Integrated GitHub API to seamlessly fetch and download repository files.
- Automated the process of downloading, analyzing code files across multiple programming languages and generating improvement suggestions.

#### Achievements

- Semi-finalist in the 13<sup>th</sup> edition of the CSI-InApp International Student Project Awards project competition with the Digital Smile Design project, recognized for innovative use of Generative AI in the field of dental aesthetics.
- Competitive Programming: Specialist(Max. 1432) at CodeForces, 4\*(Max. 1852) at CodeChef
- OpenSource Contributor in Hacktoberfest-2023
- Certified in Supervised Machine learning (Coursera)

#### Technical Skills

- Computer Science Fundamentals: Data Structures and Algorithms, Database Management Systems, Computer Networks, Operating Systems, Artificial Intelligence, Compiler Design.
- Languages: Python, C, C++, Java
- Frameworks/Libraries: NumPy, Pandas, PyTorch, Transformers
- Additional Developer Tools: Git, GitHub, Visual Studio Code, HuggingFace, Google Colab, uv.

#### Positions of Responsibility

Technical Lead Google Developer Student Clubs, SCET July 2023 - June 2024

- Leader Internet of Things Club, SCET

Aug. 2023 - May 2024

Co-Leader

CO Smriti Magazine, SCET

Aug. 2022 - Aug. 2023