

# Abhinandan Onajol

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## CAREER OBJECTIVE

Strong foundation in programming, data structures, algorithms, and core software engineering principles. Proficient in developing scalable, efficient, and reliable software systems. Experienced with collaborative tools like Jira for agile project management. Deep interest in Artificial Intelligence, focusing on RAGs, AI Agents, and advanced machine learning. Committed to solving complex problems and delivering innovative, high-impact solutions.

## EDUCATION

### KLE Technological University

KLEMSSCET, Belagavi, Karnataka

Hubballi, Karnataka

Nov 2022 – Present

- **Degree:** Bachelor of Engineering in Computer Science (Artificial Intelligence)
- **GPA:** 8.42/10
- **Relevant Coursework:** Embedded Intelligent Systems, Machine Learning and Deep Learning

### Ekalavya PU College

Pre University - Science Stream

Belagavi, Karnataka

Aug 2020 – Mar 2022

- **Achievement:** Achieved 96.17% aggregate, ranked first in PU College

### Vishwa Bharati High School

High School

Belagavi, Karnataka

June 2016 – Mar 2020

- **Achievement:** Academic Excellence: Scored 96.00%, ranked in the Top 3 of institution

## PROFESSIONAL EXPERIENCE

### KLE Technological University

Coding Club Core Member

Belagavi, Karnataka

Mar 2025 – Apr 2025

- **Organized weekly coding challenges and peer programming sessions to boost problem-solving skills among club members:**

### Cognifyz Technologies

Machine Learning Intern

Bengaluru, Karnataka

Jul 2024 – Aug 2024

- **Predictive Modeling:** Finetuned ensemble models (Random Forest) for sales forecasting with 89% accuracy
- **Feature Engineering:** Created automated pipelines for feature selection and hyperparameter tuning

## TECHNICAL PROJECTS

### Computer Vision Footfall Counter / Python, YOLOv8, ByteTrack, OpenCV, CUDA

Sep 2025 – Oct 2025

- **Project Scope:** Designed and implemented an intelligent footfall counting system using state-of-the-art deep learning for surveillance applications, processing video footage to count bidirectional pedestrian movement
- **AI Integration:** Deployed YOLOv8-nano for real-time person detection and ByteTrack algorithm for robust multi-object tracking, maintaining unique IDs across frames despite occlusions
- **Performance:** Achieved 79 FPS processing on 720p video using GPU acceleration, successfully counted 73 entries and 78 exits across 3494 frames with state machine logic preventing double counting

### Cybersecurity Intelligence Platform / Python, Multi-Agent AI, NVD API

Oct 2025 – Present

- **Objective:** Engineered automated multi-agent AI system for real-time threat intelligence analysis, vulnerability assessment, and incident response planning
- **Architecture:** Implemented 4-agent collaborative system with sequential context-aware task execution for threat analysis, CVE research, and mitigation planning
- **Integration:** Integrated free-tier APIs (NVD, CIRCL, MITRE) for real-time CVE data retrieval, processing 100+ vulnerabilities per cycle
- **Impact:** Automated markdown reports with CVSS scoring and mitigation strategies, reducing threat analysis time by 95%

**AI-Powered Knee Osteoarthritis Detection System** / *PyTorch, Android Studio* Mar 2025 – Jun 2025

- **Objective:** Developed medical diagnostic tool for early detection of knee osteoarthritis from X-ray images
- **Model Architecture:** Implemented MobileNetV3 with custom classification head
- **Optimization:** Reduced model size through pruning and quantization techniques
- **Performance:** Achieved 77.6% accuracy with sub-second inference time on mobile devices

**Customer Data Analytics Platform** / *Informatica Cloud, ETL, Data Visualization* Mar 2025 – Jun 2025

- **Data Integration:** Built ETL pipelines to consolidate customer data from 5+ sources
- **Analytics:** Developed dashboards for tracking customer lifetime value and churn prediction

## TECHNICAL SKILLS

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**Programming Languages:** Java, Python

**Software Development Framework:** Scrum, Kanban

**Project Management:** Jira

**Version Control:** Git

**Tools:** Android Studio, VS Code, Colab, Linux, GCP

**Data Engineering:** ETL, Informatica

## CERTIFICATIONS & PUBLICATIONS

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**Peer-Reviewed Publication:** "LoRA Adapter Weight Tuning with Multi-Task Learning for Faux-Hate Detection"

*ACL Anthology* — 2024

- Proposed novel adaptation of LoRA for multi-task hate speech detection
- Presented at ACL 2024 (Association for Computational Linguistics)

**Applied Generative AI Certification:** Infosys — 2025

**Data Analytics Essentials:** Cisco — 2025

**Operating Systems Basics:** Cisco — 2025

**Introduction to Java:** Sololearn — 2025

**Machine Learning with Python:** IBM — 2024