

ADONAY D. GEBREMEDHIN

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SUMMARY

Aspiring computer engineering student with a strong academic record and expertise in machine learning algorithms, computer vision, agentic systems, backend development, and AI research, passionate about driving innovation through creative and research-focused solutions. Proficient in **Python and JavaScript Ecosystems (Huggingface, Pytorch, FastAPI, React)**. Proven experience through impactful internships, research roles, and practical projects.

EXPERIENCE

Ajman University UAE

Technology Transfer/Software Intern, Innovation Center Feb. 2025 – Present

- Supporting university-incubated startups by leading **MVP development and technical support**, helping early-stage teams turn ideas into functional products and accelerate progress toward launch/readiness.

Vice President of the Computer Engineering Club Jun. 2025 – May 2025

- Led club initiatives by coordinating numerous technical and community events/workshops/competitions, managing 4 committee members, and notably increasing the engagement of engineering students in technical skill and portfolio building.

Cabinet Member at IEEE Student Chapter Jun. 2025 – May 2025

- Managing the chapter’s digital presence by handling website development and CI/CD throughout the year, while driving social media engagement growth through consistent content coordination and platform optimization.

Eastern Al Maha, EMCO Kuwait

Computer Vision Intern Jun. 2025 – Aug. 2025

- Trained and deployed three computer vision models for a system to **automatically audit retail shelves**, ensuring brand and layout compliance—driving **real-time insights for field operations**.
- Managed the inference and deployment environments. Achieved optimized latency, **effectively halving** the inference time of the entire pipeline.
- Curated high-quality datasets via **web scraping, synthetic data generation**, and targeted augmentation to address data scarcity and quality issues, leading to **27% improvement on accuracy** in one model.

Smallcap.ai Remote

Artificial Intelligence/Backend Intern Jun. 2024 – Oct 2024

- Led cross-functional integration efforts as **Integration Lead** of the team of interns, coordinating AI, backend, frontend, and database teams to ensure system compatibility, streamline collaboration, and deliver high-impact, performance-driven solutions on time.
- Engineered dynamic web applications utilizing **Python Flask, MongoDB and React.js**, improving user engagement metrics across multiple platforms and supporting active users seamlessly.
- Designed and deployed machine learning models leveraging PyTorch, in areas of **resume analysis and visual web scraping**.

EDUCATION

Ajman University United Arab Emirates
BSc. Computer Engineering (CGPA: 4.0) 2023 - Present
UAE Ministry of Education Fully-funded Scholarship

RESEARCH EXPERIENCE

CheXGround: Anatomical Region Tokens for Grounded Longitudinal Chest X-ray Interpretation

- The 37th British Machine Vision Conference (BMVC) 2026

Promptable Continuous Event Stream Segmentation

- Under Review

Enhancing Human-AI Interaction through multi-agent Explainability

- Zayed University SRC2025

PROJECT EXPERIENCE

PlanetWatch: Third Place @ Khalifa University SMAC Competition Sep. 2025

- Automating Scalable Disaster Response System using Vision and ML systems.

Radiance: First Place @ IEEE UAE Software Engineering Competition May. 2025

- A Computer Vision Application designed to aid visually impaired people through object recognition, scene recognition and others integrated with agentic system.

CrewTailor @Gemini API Developer Competition (Google) Aug. 2024

- Web platform that gives users the power to build no-code Multi-Agent LLM systems from scratch.

CERTIFICATIONS

- Sequence Models & Convolutional Neural Networks, Deeplearning.ai
- CS50 Introduction to Artificial Intelligence, Harvard University
- CS50 Web Programming with Python & JS, Harvard University
- CS50 Introduction to Computer Science, Harvard University

SKILLS & INTERESTS

- **Languages, Frameworks and Databases:** Python, JavaScript, C++ | Django, Flask, React | PostgreSQL, MongoDB
- **Machine Learning/AI:** Scikit-learn, PyTorch, OpenCV, DL Models (FM, VLM, LLM, VOT, VOS etc)
- **Project Management:** Strong interest in project coordination, strategic planning, and team leadership developed through leadership coursework and hands-on experience

