

# Artas Yaskar

Electrical Engineering Student  
AI & Backend Developer

✉ artasyaskar@gmail.com — 📞 +92 349 1609796 — 📍 Lahore, Pakistan

🌐 LinkedIn — 🏠 GitHub — 🌐 Portfolio

## Professional Summary

---

Electrical Engineering undergraduate at UET Lahore with strong practical experience in Artificial Intelligence, Backend Engineering, Computer Vision, Robotics, and Software Development. Experienced in building FastAPI services, automation systems, AI evaluation workflows, machine learning applications, and intelligent engineering solutions. Passionate about solving real-world problems through software, embedded systems, and applied AI while continuously contributing to open-source projects and technical communities.

## Education

---

**University of Engineering and Technology (UET), Lahore** Expected 2027

Bachelor of Science in Electrical Engineering

Relevant Coursework: Data Structures & Algorithms, Machine Learning, Control Systems, Digital Logic Design, Microprocessors, Signals & Systems, Power Electronics, Engineering Mathematics

## Professional Experience

---

**AI Evaluation Engineer (Freelance)** 2025 – Present

*Habitat Coding Tasks — Remote*

- Designed complex real-world coding tasks derived from large open-source repositories to evaluate state-of-the-art AI coding systems.
- Created golden patches, hidden requirements, and adversarial test suites for advanced model benchmarking.
- Performed deep codebase analysis across Python, Go, C/C++, and Rust repositories.
- Engineered failure-driven edge-case testing scenarios to improve evaluation quality.
- Applied advanced Git workflows including commit analysis, patch generation, and validation pipelines.

**AI Research & Backend Engineering Trainee** 2025 – Present

*After Query Experts (AQE) — Remote*

- Developed Python-based backend utilities and workflow automation tools for AI research operations.
- Assisted in AI model benchmarking, dataset preparation, and engineering workflow optimization.
- Built CLI-based developer tools for intelligent automation and productivity enhancement.
- Collaborated on production-oriented engineering workflows focused on scalability and reliability.

## Featured Technical Projects

---

### Autonomous Self-Balancing Robot

GitHub

- Designed and developed a two-wheel self-balancing robot using ESP32-S3, MPU6050 sensor, and L298N motor drivers.
- Improved stability by replacing a conventional PID controller with an advanced Lead-Lag controller.
- Performed real-time system analysis and controller tuning using MATLAB.
- Applied practical control systems engineering concepts to hardware implementation.

### Hand Sign Detection System

GitHub — Demo

- Built a real-time hand gesture recognition system using OpenCV and TensorFlow.
- Trained custom datasets and achieved over 95% classification accuracy.
- Implemented image preprocessing, feature extraction, and inference pipelines.

### Authenticated SaaS API Platform

GitHub — Demo

- Implemented JWT authentication, role-based access control, rate limiting, billing simulation, and API usage tracking for SaaS-style backend systems

### AI Inference Backend Platform

GitHub — Demo

- Designed backend infrastructure for serving machine learning and LLM inference workloads.
- Implemented request batching, asynchronous APIs, Dockerized deployment, and latency optimization.
- Focused on scalability, maintainability, and production-readiness.

### ControlVerse

GitHub — Demo

- Built a Python and MATLAB simulation platform for control systems education.
- Developed interactive simulations used for academic learning and laboratory exercises.
- Improved visualization and understanding of complex control engineering concepts.

### Futuristic AI Tic-Tac-Toe

GitHub — Demo

- Built a responsive AI-powered game using Next.js, TypeScript, Tailwind CSS, and Framer Motion.
- Implemented Minimax with Alpha-Beta pruning for optimal gameplay decisions.
- Designed an engaging futuristic UI with modern animations and UX principles.

## Additional Projects

---

- Distributed Task Processing Framework GitHub
- CLI Arena Ecosystem GitHub
- CyberWatch CLI Framework GitHub
- Dual Active Bridge Converter Simulation
- Portfolio Website GitHub — Demo
- 3D Dino Game GitHub — Demo

Technical Skills

---

Programming Languages

Python, Go, JavaScript, SQL, Shell, HTML, CSS, LaTeX

Backend Development

FastAPI, Flask, REST APIs, Authentication Systems, Async Programming, API Design

AI & Machine Learning

Machine Learning, NLP, Computer Vision, TensorFlow, OpenCV, AI Evaluation, Inference Pipelines

Embedded & Engineering

ESP32, MATLAB, Control Systems, Power Electronics, Robotics

Developer Tools

Git, GitHub, Docker, Linux, VS Code, Postman

Certifications

---

|                                          |      |
|------------------------------------------|------|
| Microsoft Azure AI Fundamentals (AI-900) | 2025 |
| <a href="#">View Certificate</a>         |      |

|                                                 |      |
|-------------------------------------------------|------|
| Certificate of Experience – After Query Experts | 2025 |
| <a href="#">View Certificate</a>                |      |

Achievements

---

- Maintained and published 30+ GitHub repositories covering AI, backend engineering, automation, robotics, and simulation systems.
- Developed practical engineering projects combining Electrical Engineering principles with software development.
- Built production-oriented AI and backend systems from architecture to deployment.
- Contributed to AI evaluation, benchmarking, automation, and open-source development workflows.

Interests

---

Artificial Intelligence, Backend Engineering, Computer Vision, Robotics, Control Systems, Developer Tooling, Open Source Software