# Hari Om Bhardwaj

harry-urek.github.io Linkdin

#### Education

• Siksha O Anusandhan University, ITER Bachelor of Engineering in Computer Science; GPA: 3.1, CGPA(7.91/10.0)

• Indian Institute Of Technology–Madras Bachelor of Science in Data Science; GPA: 3.0, CGPA(7.56/10.0)

## EXPERIENCE

• Gradio

Maintainer/ Contributor

- **Gradio Client (Manitainer)**: Implemented streamlined workflows by consolidating overlapping project tickets into single action items, enhancing clarity across teams while improving overall efficiency benchmarks tracked monthly against prior periods.
- **Issue (Contributor): assert Vulnerability**: Enhanced software robustness by resolving security issues through assert statement removal and error handling implementation. Improved code maintainability and readability by developing custom Error classes aligned with project requirements.

## Projects

## • ROOM - Messaging Backend

FastAPI, PostgreSQL, Docker, Redis, SQLAlchemy, Protocol Buffers

- Security: FastAPI messaging with E2E encryption, Auth0, and protobul for security.
- Optimized messaging: Real-time messaging via WebSockets, Redis PUB/SUB, and protobul optimization.
- $\circ~$   ${\bf Async-performance:}$  Async architecture for concurrent processing and improved performance.
- $\circ~$  Fast-deployable: Docker-packaged for easy, scalable deployment.

# • Kratos - Microservice Session Management Library

 $Go,\ JWT,\ OAuth\ 2.0,\ gRPC,\ WebSockets$ 

- **Description**: Developed a comprehensive session authentication and management library designed for high-performance microservice architectures in Go. It validates, monitors and communicates user and its resources
- Authentication: Used OAuth 2.0 authentication protocol for user verification and login. Cookie-based session validation mechanisms. Implemented robust JWT authentication for secure transactions between users and other services.
- **Inter-Service-Communication**: Using gRPC protocol with WebSockets for real-time, low-latency transactions between services and management system. Kafka is used for messaging passing between services that are producing and consuming each other. Add a robust logging system.
- **Future development** : Replace Go channels with Message Queues for producer and consumer transactions. Add monitoring through testing and analytics of services using Kratos. Containerize the whole application.

• Yogi's EYE

 $FastAPI,\ PostgreSQL,\ Docker,\ Pydantic,\ Roboflow,\ Alembic$ 

- EfficientNet Architecture:: Implemented a custom training regimen on a Roboflow-processed dataset, allowing the ML model (EfficientNet-b1) to adapt to over 8 distinct Ayurvedic plant characteristics, improving accuracy for diverse species recognition.
- **Containerized Deployment**: Hosted within a Docker container, it utilizes Alembic migration and PostgreSQL to manage and store recognized plant details efficiently.

## PROGRAMMING SKILLS

Languages: GoLang, Python, JavaScript Frameworks: FastAPI, Flask, Django, Express, NextJS Database: PostgreSQL, MySQL, Redis, MongoDB Libraries: PyTorch, Pandas, SQLAlchemy, Pydantic Tools: Git, Vim, GitHub Workflow, Docker, AWS

### Email : hariombhardwaj038@gmail.com Mobile : +91 7357387554 Github Leetcode Kaggle

Bhubaneshwar, Odisha, India Sep. 2021 – June. 2025 Chennai, Tamil Nadu, India Aug. 2023 – Dec. 2027

> Open Source Sep 2023 - Nov 2023

> > Github : ROOM Solo Dev

 $Github:\,KRATOS$ 

Solo Dev

 $Github\,:\,Y\text{-}EYE$ 

Team Lead