

HITARTH BHARAD

Tucson, Arizona, 85705

☎ +1 (520)-342-9637 ✉ hitarth.bharad@gmail.com  [linkedin.com/in/hitarthbharad](https://www.linkedin.com/in/hitarthbharad)  github.com/HitarthBharad [Website](#)

Education

University of Arizona

MS Information Science

Aug 2023 - May 2025

Tucson, Arizona

Dhirubhai Ambani University

BTech Information and Communication Technology

Aug 2017 - May 2021

India

Work Experience

FERO.AI

Software Engineer

Sep 2021 – Jul 2024

Dubai, UAE

- Architected distributed cloud-native systems for a multi-tenant SaaS logistics platform, designing microservices with **Java (Spring Boot)** and **FastAPI** deployed using Kubernetes and **Azure**, to power critical modules such as Authentication, Payments, Freight Planning, and Revenue Tracking.
- Built real-time integration pipelines connecting 30+ third-party systems using **Kafka**, **Redis queues**, and async jobs, reducing ETL latency by **35%**, improving data integrity, and enabling seamless cross-platform data exchange.
- Led development of **CrossDock (iPaaS)**, a distributed integration platform that standardized APIs and ETL logic, enabling plug-and-play service connectivity and cutting internal development lead time by **60%**.
- Developed and optimized frontend features using **Next.js**, **React**, and **TypeScript**, integrating seamlessly with backend APIs, implementing caching and efficient query logic, and improving system performance and user experience.
- Mentored a team of 5 engineers, led prototyping and system architecture reviews for new projects, and collaborated across functions to accelerate product delivery, ensure scalability, and improve engineering best practices.

Verse Innovation

Associate Software Engineer

Jun 2021 – Aug 2021

Bangalore, India

- Optimized backend API architecture using **Java (Spring Boot)**, adding indexing and load balancing to handle concurrent requests, which reduced response times by **40%** and increased throughput by **25%** for a high-traffic video streaming platform serving **10M+ daily active users**.
- Implemented user management and personalized data feed services by integrating **AI-driven content recommendation models**, improving user engagement by **20%** and boosting retention rate by **15%** across millions of daily sessions.

Projects

Aegion

[aegion.app](#)

FastAPI, NextJS, WebSockets, Vector Search, Embeddings, GPT-4, PostgreSQL, AWS

- Built Aegion, a real-time agent orchestration platform with FastAPI, Next.js, WebSockets, PostgreSQL, and vector search, enabling natural language-driven automation of multi-step workflows.
- Implemented Inference, Decision-Making, and Execution Engines to dynamically plan, route, and execute tasks across integrated tools, reducing setup time and simplifying adoption for non-technical users.

Auto PO Processor

[auto-po.app](#)

Next.js, TypeScript, FastAPI Python, ShadCN UI (Tailwind)

- Built a platform to automate extraction of line-item details from PDF purchase orders using OCR, reducing manual data entry. Implemented item matching against a master database, suggesting top 5 potential matches to aid quick validation and correction.

Tucson Crime Pattern Analysis Dashboard

[Dashboard](#)

R (Shiny App, Quarto), PostgreSQL, Leaflet.js, Time-Series Analysis

- Built an interactive crime analytics dashboard using R (Shiny, Quarto) for real-time data visualization.
- Integrated Leaflet for interactive maps, allowing users to filter crime hotspots by time, type, and location. Developed time-series & Geospatial models for crime pattern analysis, helping authorities allocate resources efficiently.

Technical Skills

Languages: Python, Java, C++, Rust, HTML/CSS, JavaScript, TypeScript, SQL

Performance Optimization: Multi-threading, memory-efficient algorithms, Profiling

Technologies/Frameworks: Linux, Express.js, Next.js, FastAPI, React, Spring boot, Tailwind, WebSockets

Database: PostgreSQL, MySQL, MongoDB, Redis

Cloud: AWS, Azure, Jenkins, Kubernetes