

SUMMARY

Turning AI ideas into usable systems: systems that do not only run models, but understand data, use tools, make decisions, and fit into real product workflows. My current goal is to deepen that learning through building, benchmarking, and data-driven evaluation.

TECHNICAL SKILLS

AI Engineering: LLM applications · RAG · Embeddings · Reranking · Agentic workflows · LLM evaluation · Grounding
Backend: Python · FastAPI · NestJS · REST APIs · SQLAlchemy · Prisma · Pydantic · Celery
Data: PostgreSQL · Qdrant · Redis · SQLite · BM25 · Alembic
Product & Web: Next.js · React · TypeScript · Tailwind CSS · RTL / i18n · SaaS domain modeling
Infrastructure: Docker Compose · Git · Linux · Local LLM serving · Background workers

SELECTED PROJECTS

LegalGraphRAG RELIABILITY EXPERIMENT IN PROGRESS

A practical research pipeline for testing which interventions most improve Legal RAG reliability, with documented experiments across retrieval, graph structure, reasoning, citation checks, and evaluation metrics. Building the baseline, evaluation workflow, experiment logs, and reliability checks needed to compare retrieval and graph-based methods without changing the base model too early.
Python · RAG · Graph RAG · GNN · NLP · Reranker · USA Legal Data · Colab · [github.com/MrAshki/legal-rag](#)

QuestLine MVP IN PROGRESS / OPERATIONAL CORE READY

A role-aware sports SaaS MVP with explicit business rules, multi-role application shells, modular APIs, and a relational product model. Built and documented a TypeScript monorepo across auth, coach verification, athlete relationships, quests, sessions, attendance, calendar, follows, profiles, and the payment MVP flow.
Next.js · NestJS · TypeScript · Prisma · PostgreSQL · TailwindCSS · Turborepo · pnpm workspace · [github.com/MrAshki/Questline_Product](#)

Teacher-Supervised AI Exam Platform PROTOTYPE READY

A class-centered monorepo for exam authoring, scheduling, student-specific access links, deterministic and AI grading, teacher review, result publication, leaderboards, and appeals. Designed and implemented the core domains, modular APIs, Celery queues, grading and AI flows, review system, publishing, appeals, audit logs, and end-to-end tests.
Next.js · FastAPI · Python · PostgreSQL · Redis · Celery · SQLAlchemy · Docker · [github.com/MrAshki/exam_product](#)

Document Assistant ACTIVE DEVELOPMENT

A Persian-first document intelligence workspace for grounded QA, summaries, comparisons, table questions, multi-turn conversations, and structured AI tools. Implemented the application surface, authoritative request dispatcher, hybrid dense/BM25 retrieval with RRF, bounded reranking, citation validation, document ingestion, streaming, persistence, and evaluation harnesses.
Python · FastAPI · Next.js · PostgreSQL · Qdrant · BM25 · OpenRouter · Docker · [github.com/MrAshki/rag-system](#)

Resume Intake Agent PUBLISHED

A local LangGraph and LLM pipeline that reads text or scanned resumes, builds a candidate profile, evaluates fit, pauses for Telegram approval, then coordinates the calendar event and invitation email. Designed and implemented an agentic LangGraph pipeline with structured extraction, state-based branching, checkpointed human approval, SQLite memory, and integrations with Google Sheets, Calendar, Gmail, and Telegram.
Python · LangGraph · Ollama · Pydantic · SQLite · Google APIs · Telegram · [github.com/MrAshki/resume_bot](#)

Mission Control OS PUBLIC 0.7, FUNCTIONAL PROTOTYPE IN PROGRESS

A dashboard plugin for Hermes Agent that connects to the runtime through a FastAPI bridge and exposes a live /mission-control panel for snapshots, chat, approval queue, agentic operations, sessions, agent/provider settings, and local voice/TTS. Designed and implemented the plugin architecture, manifest, backend API, dashboard asset pipeline, session-backed bridge, runtime and talk endpoints, operation/event store, approval bridge, Agent/Skill/Tool settings, and local Whisper and Piper hooks.
Hermes Agent · FastAPI · Python · JavaScript · Whisper · Piper · [github.com/MrAshki/mission-control-os](#)

INDEPENDENT PROJECTS AND HANDS-ON LEARNING

Personal prototypes across applied AI, backend systems, SaaS concepts, agent orchestration, and bilingual interfaces. These projects represent self-directed practice rather than client or employer experience.

EDUCATION

B.A. in Psychology, Imam Reza University

CURRENT LEARNING & RESEARCH

I am currently deepening my knowledge of agentic AI and RAG by building personal prototypes, testing ideas with measurable criteria, and documenting what I learn.