

MEHMET DEMIRCI

AI SOLUTIONS ENGINEER

Turkey, UAE & remotely available worldwide · [LinkedIn profile](#)

PROFESSIONAL PROFILE

AI Solutions Engineer with 7+ years of experience designing, developing and deploying production machine-learning systems. Specializes in LLM agents, retrieval pipelines, document intelligence and computer vision, with a track record of integrating reliable AI capabilities into enterprise, transport and industrial environments.

7+	3	90%+	3
Years delivering applied AI	Document tools in production	Field-level accuracy	Selected publications

CORE STRENGTHS

LLM agents & tool calling

Document intelligence

Async Python & FastAPI

AWS, Docker & Kubernetes

RAG and retrieval pipelines

Computer vision

Knowledge graphs & vector search

Production readiness & delivery

SELECTED PROJECTS

Document Intelligence & Process Automation

innoscripta SE · Enterprise AI

Led the delivery of a shared extraction service for invoices, emails and timesheets. Scoped outputs around downstream needs, established stable API contracts and moved three tools into production at 90%+ field-level accuracy. Since launch, the service has saved more than €60,000 in manual processing costs.

Enterprise Knowledge Graph

innoscripta SE · Data and AI architecture

Designed the extraction approach for fragmented European enterprise data, combining agentic workflows, entity resolution, graph storage and semantic search. Focused the architecture on traceability and controlled failure modes so automated conclusions could be reviewed and corrected.

Safety-Critical Vision Systems

ISSD · Intel, fortiss and Huawei partnerships

Supported solution design and field delivery for tunnel, highway and rail-crossing detection systems. Balanced latency, false-alert rates and edge-hardware constraints, helping move computer-vision systems from model evaluation into live transport environments.

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PROFESSIONAL EXPERIENCE

AI Solutions Engineer

innoscripta SE · Germany · Hybrid | Oct 2021 – Sep 2026

- Led discovery and delivery for enterprise document-intelligence products, translating operational workflows into scoped extraction services and measurable acceptance criteria.
- Delivered invoice, email and timesheet parsers at 90%+ field-level accuracy and integrated them into existing operational workflows.
- Designed agentic data-extraction pipelines for European enterprise information, including entity resolution, knowledge-graph integration and controls for reviewable AI decisions.
- Created stable FastAPI service contracts and AWS-based delivery pipelines so product teams could adopt AI capabilities without depending on model internals.
- Advised delivery teams on model trade-offs, integration constraints, failure modes and production-readiness decisions.

ML Solutions Engineer · Applied AI Delivery

ISSD Bilişim Elektronik A.Ş. · Turkey · Hybrid | Aug 2018 – Sep 2021

- Delivered real-time incident-detection systems for highways and tunnels with Intel and fortiss, aligning model behaviour with operational response needs and roadside hardware limits.
- Contributed to a 3D container-scanning solution for an Istanbul port, evaluating new sensing hardware and improving operational throughput while reducing misreads.
- Supported a Huawei rail-safety engagement in Serbia, defining detection around the time available for operators to act rather than model accuracy in isolation.
- Designed, developed and deployed roadside variable-message-sign systems across multiple Turkish cities, covering engineering decisions through field commissioning.

TECHNICAL FOUNDATION

Applied AI: LLM agents, RAG, NLP, document AI, object detection, time-series forecasting

Architecture: FastAPI, asynchronous services, microservices, knowledge graphs, vector search

Infrastructure: AWS, Docker, Kubernetes, CI/CD, OpenVINO edge compute

Engineering: Python, C++, Qt, PostgreSQL, JanusGraph, AWS Neptune, Qdrant, Elasticsearch, Redis, MongoDB

EDUCATION AND LANGUAGES

MSc, Sustainable Environment and Energy Systems

Middle East Technical University, Northern Cyprus Campus · 2017

BSc, Mechatronics & Automation Systems Engineering

Eastern Mediterranean University · 2014-2017

Turkish · Native English · Fluent German · Beginner

SELECTED PUBLICATIONS

Mehmet Demirci · Incident Detection on Junction Using Image Processing (2021)

Mehmet Demirci · Application of the Neural Network Dependability Kit in Real-World Environments (2020)

Mehmet Demirci · Aiming for Smart Wind Energy (2019)