

EDUCATION	<b>Department of Computer Engineering, Hacettepe University</b> <i>MSc. in Computer Science</i> <ul style="list-style-type: none"><li>• GPA: 3.83</li><li>• Advisor: Prof. Dr. Erkut Erdem</li><li>• Participated in a joint research program between Koç University, Hacettepe University, and the National Institute of Advanced Industrial Science and Technology (AIST), funded by TÜBİTAK.</li><li>• Research area: Multimodal Large Language Models, Vision-Language Learning, and Efficient Foundation Model Architectures</li></ul>	Ankara, Türkiye 2022 - 2025
	<b>Department of Computer Engineering, TOBB University of Economics and Technology</b> <i>BSc. in Computer Science and Engineering</i> <ul style="list-style-type: none"><li>• Thesis: <i>Roadpulse (First ranked)</i></li><li>• Roadpulse is a real-time application designed to detect road potholes using camera streams.</li></ul>	Ankara, Türkiye 2015 - 2020
PUBLICATIONS	<ol style="list-style-type: none"><li>1. Karanfil, E., Imamoglu, N., Erdem, E., &amp; Erdem, A. (2025). <i>A Vision-Language Framework for Multispectral Scene Representation Using Language-Grounded Features</i>. <i>IGARSS 2025</i>. <a href="https://arxiv.org/abs/2501.10144">https://arxiv.org/abs/2501.10144</a></li><li>2. Karanfil, E., Imamoglu, N., Erdem, E., &amp; Erdem, A. (2025). <i>Spectral-LLaVA: A Multimodal Large Language Model for Multispectral Remote Sensing with Instruction Tuning</i>. Preprint.</li></ol>	
EXPERIENCE	<b>Prometa AI, Istanbul</b>   Software Engineer, Generative AI <ul style="list-style-type: none"><li>• Consulting for leading enterprises in Türkiye on the design and deployment of large-scale agentic systems and intelligent automation pipelines.</li></ul>	2025.05 - Present
	<b>AIST Research Institute, Tokyo</b>   Visiting Researcher <ul style="list-style-type: none"><li>• Developed <i>Spectral-LLaVA</i>, a framework bridging spectral imagery and natural language through spectral-aware encoders and instruction tuning.</li></ul>	2024.10 - 2025.04
	<b>n11.com</b>   Software Engineer, Machine Learning <ul style="list-style-type: none"><li>• Optimized the Search Engine's spell-checker module, achieving a ~1% reduction in zero-result query rate and improving query relevance.</li><li>• Developed a visual similarity retrieval service using deep feature embeddings, enhancing search experience and product discovery.</li></ul>	2024.01 – 2024.10
	<b>Trueyogi</b>   Software Engineer, Machine Learning <ul style="list-style-type: none"><li>• Developed a human face analysis module capable of detecting lesions, acne, and wrinkle locations using unsupervised learning techniques without requiring labeled data, and recently reached ≈ 5,000 subscribed users.</li></ul>	2022.06 - 2024.01
	<b>GarantiBBVA Technology</b>   Software Engineer, Data <ul style="list-style-type: none"><li>• Designed and implemented a real-time anomaly detection pipeline capable of processing over 300,000 data points per minute, enabling scalable model training and low-latency predictions.</li></ul>	2020.05 - 2022.06

TECHNICAL  
COMPETEN-  
CIES

**Machine Learning & Deep Learning:** PyTorch, TensorFlow, Distributed Training (Deep-Speed, FSDP)  
**Programming:** Python, Java, Scala, SQL  
**Data & Infrastructure Systems:** Apache Spark, Kafka, Hadoop, BigQuery, Dataflow, Vertex AI Feature Store  
**Databases & Vector Stores:** PostgreSQL, MSSQL, BigQuery, MongoDB, Milvus, FAISS, Redis  
**Cloud & DevOps:** Google Cloud Platform (GCP), Docker, Kubernetes, Cloud Run, Artifact Registry, CI/CD (Jenkins)  
**APIs & Services:** FastAPI, RESTful Architecture, gRPC, Microservices Design  
**System Design & Scalability:** Event-Driven Pipelines, Streaming Data Processing, High-Throughput ML Serving

ACADEMIC  
SERVICES

**Teaching Assistant** *CMP 784: Deep Learning (Graduate Level)*  
Delivered invited talks on *Multimodal Learning* at:  
– Nanyang Technological University (NTU), Singapore  
– Technical University of Berlin, Germany  
– National Institute of Advanced Industrial Science and Technology (AIST), Japan  
– IGARSS 2025, Brisbane, Australia (Oral Presentation)