

EDUCATION	School of Computer and Communication Sciences (IC), EPFL <i>Ph.D. in Computer Science</i> • Admitted to the EDIC Doctoral Program with EPFL Fellowship.	Lausanne, Switzerland Sept 2025 - Current
	Department of Computer Science, Bilkent University <i>B.Sc. in Computer Science</i> • GPA: 3.96/4.00, 1st ranked (Valedictorian) in graduating class	Ankara, Turkey Sept 2021 – June 2025
ACADEMIC EXPERIENCE	CICEKLAB Ankara, Turkey Website Link • Conducted bioinformatics research under the supervision of Prof. Ercüment Çiçek, with a focus on AI-driven sequence generation for drug discovery . • Pretrained and fine-tuned transformer-based models including GPT-2 and T5 to enable RNA sequence generation conditioned on target protein structures. • Adapted and integrated published models such as GenerRNA and ProtBERT to support protein-informed RNA generation pipelines. • Optimized pretrained models using reinforcement learning with the GRPO to enhance binding affinity , GC content , and minimum free energy . • Validated seq. quality using DeepBind to predict and score binding affinities.	Feb. 2024 – June 2025
	Ottawa-Bilkent Massive IoT Project Ankara, Turkey • Collaborated with Prof. Orhan Arikan and Huawei Ottawa on IoT comm systems. • Designed and implemented a multi-agent reinforcement learning framework to optimize wireless bandwidth allocation in city-vehicle IoT networks. • Curated datasets pipeline and developed a semantic communication system . • Authored a report titled " <i>Effective Communications in the Goal-Oriented Semantic Signal Processing Framework</i> " (internal publication). Presented findings to Huawei Wireless CTO Dr. Wen Tong and his team during the Ottawa-Bilkent Workshop .	Feb. 2023 – Jan. 2025
PROJECTS	Variant-Net Search Engine Search Engine for Genomics • Developed a knowledge graph-based search engine to analyze genomic variants. • Implemented an Agentic RAG system using Milvus , Supabase , and Neo4j as the vector, relational, and graph databases. Integrated DGI RAG to Vector RAG and Graph RAG pipelines to retrieve similar nodes and provided 70+ tool integrations. • Designed and deployed Deep Research modules to generate domain-specific reports and automate scientific document exploration. • Received the Best Data Science Project Award in Bilkent University's CS492 Graduation Projects , worth 90,000 TL (~\$2,570). • Secured \$2,000 funding from T3 Foundation's AI Researcher Scholarship Program .	Fall 2024 – June 2025
	Rubber Duck AI AI-based Learning Companion • Developed an AI-based learning companion utilizing the Feynman Technique to simplify complex concepts via knowledge graphs and a multi-agent framework. • Generated knowledge graphs from academic sources and traversed query-relevant subgraphs through coordinated agent-human interaction. • Integrated LangChain and LangGraph for orchestrating LLM agents, leveraging Vespa as a vector database and Neo4j for graph storage. • Ranked 1st in Amazon University Engagement Program, earning \$4000 .	Jun. 2024 – Sep. 2024
	Bilkent Online Platform for Material Exchange • Co-founded and led Bilkent Online , a platform facilitating seamless material exchange and fostering student discussions across the university. • Built the platform using React , Node.js , MongoDB , and Express . • Secured funding from the Microsoft Founders Hub (\$5000 fund) and recognized as the Best Software Engineering Project in Bilkent's CS319 course.	Nov. 2023 – May 2024
	Multi-Agent Drone Simulation LLM-Based Tactical System • Developed a multi-agent drone simulation , enabling drones to autonomously perform tactical missions using LLM-based decision making . • Designed a hierarchical control system with a centralized GPT-4 strategist and decentralized agents for adaptive pathfinding and threat avoidance.	May 2025 – July 2025

WORK EXPERIENCE	AI Engineer, ROKETSAN Ankara, Turkey	Jan. 2025 - July 2025
	<ul style="list-style-type: none"> Engineered a multi-agent LLM system to simulate and enhance situational awareness within a tactical war game environment. Constructed agentic RAG pipelines for automated knowledge extraction and analysis from complex documents. Developed a multi-agent LLM to automate the generation of in-depth research reports. 	
	NLP Intern, Digital Transformation Office Ankara, Turkey	July 2024 - Aug. 2024
	<ul style="list-style-type: none"> Fine-tuned transformer models for rating and review analysis on a dataset of 200k e-commerce reviews, which I personally scraped and curated. Dataset Designed an LLM-based pipeline with Llama3 and DeepSeekCoder v2 to automatically detect potential internal data leaks in documents. 	
TEACHING EXPERIENCE	Candidate Engineer, ASELSAN Ankara, Turkey	Feb. 2024 - June 2024
	<ul style="list-style-type: none"> Developed console applications to control, test, and interface with advanced camera systems for computer vision technologies. 	
	AI Research Intern, Huawei Ankara, Turkey	June 2023 - Aug. 2023
	<ul style="list-style-type: none"> Designed a traffic simulation environment in CARLA using semantic cameras to capture multi-object scenarios. Trained a Deep Q-Network agent for autonomous vehicle control, achieving optimal navigation in complex, simulated traffic. Source Code 	
SCHOLARSHIPS	CS101 - Algorithms and Programming I Bilkent University	Fall 2022
	<ul style="list-style-type: none"> Conducted 10 lab sessions on Java, algorithms, and fundamentals of programming 	
	CS223 - Digital Design Bilkent University	Spring 2023
	<ul style="list-style-type: none"> Led 6 lab sessions on digital design, System Verilog, BASYS3, and FPGA. 	
TEST SCORE	<ul style="list-style-type: none"> Salih Karagöz AI Support Scholarship (2025) Awarded to support students contributing to scientific research in Turkey. AWS AI-ML Scholarship Program (2024) Awarded by Amazon and Udacity for achieving 1st place in Amazon's competition. Bilkent Comprehensive Scholarship (2021-2025) Full scholarship provided by Bilkent University in recognition of academic excellence. Cahit Arf Government Scholarship (2021–2025) Awarded by Turkish Government for a top 100 ranking in the university entrance exam. TUBITAK 2247-C Scholarship (July 2022–January 2023) Granted by TUBITAK for participation in the Intern Research Scholarship Program, 	
	<ul style="list-style-type: none"> Rank: 28/139,565, Academic Personnel and Postgraduate Education Entrance Exam 2024 Rank: 98/2,573,156, Higher Education Institutions Exam for Social Score 2022 Rank: 89/2,592,390, Higher Education Institutions Exam for Math-Science Score 2021 	
	<ul style="list-style-type: none"> Bilkent AI General Secretary (+500 Members) Website Link 2023 – 2025 Spearheaded partnerships with industry leaders such as NVIDIA and Notion. Partnered with Global Turks AI and hosted experts from OpenAI, Google, Meta. 	
	180DC Bilkent Consultant Ankara, Turkey	2022 – 2023
COMMUNITY INVOLVEMENT	<ul style="list-style-type: none"> Partnered with Bain Company to develop effective marketing strategies for AÇEV. 	
	Bilinç ve Hikmet Philosophy Society Lead (2 Issues) Samsun, Turkey	2020 – 2022
	<ul style="list-style-type: none"> Coordinated online discussions on modern philosophy and published two issues 	
	ATAMUN Head of MUN Society Samsun, Turkey	2018 – 2020
REFERENCES	<ul style="list-style-type: none"> Served as DSG for ATAMUN'19, and USG during ATAMUN'18 	
	<p>Prof. Orhan Arıkan, Dean of Engineering at Bilkent University Email: oarikan@bilkent.edu.tr, Tel: (+90 312) 290 12 08</p>	
	<p>Assoc. Prof. A. Ercüment Çiçek, Department of Computer Science at Bilkent University Email: ercument.cicek@bilkent.edu.tr, Tel: (+90 312) 290 69 41</p>	
	<p>Dr. Mert Kalfa, Engineering Manager at Meteksan Savunma Email: kalfa@ee.bilkent.edu.tr, Tel: (+90 505) 559 83 17</p>	