

Kivanc Serefoglu

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[LinkedIn](#) | [GitHub](#)

EDUCATION

Illinois Institute of Technology

Chicago, USA

Master of Computer Science

September 2025 – May 2027

Courses: Machine Learning, Cloud Computing, Deep Learning

Ozyegin University

Istanbul, Turkiye

Bachelor of Computer Science

September 2019 – June 2024

Courses: Introduction to Artificial Intelligence, Introduction to Deep Learning, Analysis of Algorithm

Promotion Team Member - Represented Ozyegin University at student outreach events.

Honors: UN Refugee Project, XII International Science Quiz - 1st place in Math

Extracurricular: Basketball Player: Fenerbahce Sports Club & High School Team (2016-2018),

Board Member: Engineering Club (2022), Science Club (2021), Turkish Student Associate (2025)

SKILLS

Programming Languages: Python, Java, C#, SQL, C++

AI & ML: PyTorch, TensorFlow, scikit-learn, LLMs, Multi-Agent Systems, Time-Series, NLP

Systems & Backend: LangChain, MCP, Spring Boot, .NET, REST APIs, PostgreSQL, MSSQL, React, ROS2

Cloud/DevOps & Tools: AWS (EC2, S3), Docker, Linux, Git, Bitbucket, Jira, Confluence, Microsoft 365

PROFESSIONAL EXPERIENCE

Research Assistant (Graduate Researcher)

Chicago, USA

The Robotics Lab - IIT

February 2026 – Present

- Deployed end-to-end autonomy stack on Jetson for real-time ML-driven UAV decision-making.
- Designed modular autonomy framework with plug-and-play ML modules and real-time validation.

IT Consultant

Istanbul, Turkiye

Management Solutions

April 2025 – September 2025

- Developed SQL-based data validation pipelines aligned for large-scale financial datasets.
- Automated reconciliation workflows, increasing data validation coverage from 20% to 90%.

Co-Founder

Istanbul, Turkiye

UniPool (Non-profit Startup)

October 2023 – July 2025

- Co-founded a Flutter-based ride-sharing app for iOS and Android serving 500+ users.
- Deployed and managed app services on AWS EC2 and S3 ensuring scalable performance.

Software Developer (Part-time)

Istanbul, Turkiye

BSH (Bosch & Siemens)

September 2023 – June 2024

- Built a scalable .NET + MSSQL website to support and streamline internal R&D projects.
- Optimized database speed and supported Agile development of web solutions.

Software Engineering Intern

Istanbul, Turkiye

Arcelik

July 2023 – September 2023

- Developed a React + Spring Boot asset system with secure JWT authentication.
- Integrated MSSQL database and REST APIs to improve scalability and reliability.

Research Assistant

Istanbul, Turkiye

Ozyegin Industry 4.0 Lab

July 2022 – September 2023

- Collected and analyzed data from AGVs and warehouse robots using Python (pandas, NumPy).
- Built Python pipelines for sensor processing, optimization, and performance analytics.

PUBLICATIONS

AAMAS 2025 (First Author) — [UAV Marketplace Simulation Tool for BVLOS Operations](#)

- Developed a [Java-based multi-agent simulation tool](#) to model (Unmanned Aerial Vehicle) UAV collaboration under adversarial conditions and evaluate team-formation strategies.

ECAI 2025 (First Author) — [Reputation-based Team Formation for Multi-UAV BVLOS Operations](#)

- Proposed a dynamic reputation algorithm for reliable and secure coordination among UAVs operating Beyond Visual Line of Sight (BVLOS) missions, improving trust and mission success.

SELECTED APPLIED MACHINE LEARNING PROJECT

FinS2IP-LLM: Semantic-Prompted Financial Forecasting with LLMs

- Designed and trained an LLM-based time-series forecasting architecture in PyTorch integrating semantic prompts and multi-channel financial indicators.
- Built automated data pipelines and improved S&P 500 forecasting stability/performance.