

EDUCATION

- Ozyegin University** Istanbul, Turkey
M.Sc. in Artificial Intelligence Graduated: August 2023
- **Thesis:** A Comprehensive Human-Agent Negotiation Framework: Preferences, Emotion & Interaction
 - **Research Interests:** Multi-Agent Systems, Human-Agent Interaction, Robotics, Reinforcement Learning
- Ozyegin University** Istanbul, Turkey
B.Sc. in Computer Science Graduated: December 2019

EXPERIENCE

- Kanzy Financial Technologies** London, UK
Co-founder & CTO March 2024 - On Leave
- Led a 5-person PhD-level R&D team (RL, MAS, RecSys) to create Finguru, a personalized financial advisor agent for complex decision support, backed by NVIDIA Inception, Google for Startups AI and strong pre-seed investment.
 - Architected a multi-agent stack utilizing LangGraph, DSPy, and Text-to-SQL in addition to a proprietary AI-native financial toolbox to orchestrate agent performance under distribution shifts in real-time.
 - Built a high-throughput multimodal RAG pipeline processing 20+ GB/day of real-time market data, SEC filings, and news. Integrated high-frequency vector search with guardrailed LLMs to generate source-grounded, literacy-adaptive responses (Resulted in the co-authorship of 2 Information Retrieval publications).
 - Developed a persistent preference-learning and memory layer to model dynamic user goals and risk tolerance, ensuring agent outputs strictly aligned with reliability, fairness, and transparency constraints in a compliance-heavy domain.
- Ozyegin University** Istanbul, Turkey
Research Assistant, [Interactive Intelligence Systems Lab](#), PI: Dr. Reyhan Aydogan August 2018 - August 2023
- Developed 2 granted open-source frameworks for human-agent negotiation and decentralized multi-agent path finding with 10+ peer-reviewed publications in reputable venues (IJCAI, AAMAS, HRI, JAAMAS, and IEEE THMS).
 - Investigated the divergence between optimal game-theoretic behaviors of utilitarian agents and human decision making and integrated dynamic preference modeling and emotion-aware strategies to align agent outputs.
 - Oversaw lab operations and mentored 6 MSc/BSc researchers in multi-agent systems, expediting critical project timelines. Awarded the Best Research Assistant and secured the National MSc Research Scholarship.
- Technische Universiteit Delft** Delft, NL
Visiting Researcher, [Interactive Intelligence Group](#), PI: Prof. Catholijn Jonker June - October 2022
- Developed a multimodal (speech, vision, gesture) human-agent negotiation framework designed to enhance collective decision-making and validate human-agent alignment through complex, configurable human-robot experiments.
- University of Cambridge** Cambridge, UK
Visiting Researcher, [Affective Intelligence & Robotics Lab](#), PI: Prof. Hatice Gunes January - April 2022
- Researched the impact of personalized emotion-aware strategies on human-robot negotiation utilizing continual learning on the humanoid robot Pepper to dynamically adapt to users' facial expressions.
- Brown University** Providence, RI, USA
Visiting Researcher, E-GLAMOR Group, PI: Prof. Amy Greenwald June - August 2021
- Created a supply chain manager agent responsible for production planning, agreements, market risks analytics to maximize long-term profits & social welfare ([Runner-up in the Supply-Chain Management League in IJCAI 2021](#)).
- Oregon State University** Corvallis, OR, USA
Research Scholar, [Collaborative Robotics & Intelligent Systems Institute](#), PI: Prof. Yigit Menguc June - August 2018
- Built a 3D printer path optimizer using machine learning and combinatorial optimization (Lin-Kernighan, Christofides) to reduce the print time by 20–25% and costs by 5–10%.

SKILLS

- **Programming:** Python, R, Java, MATLAB
- **Frameworks:** PyTorch, Hugging Face, DSPy, LangChain, TensorFlow, OpenCV
- **Tools & Infrastructure:** ROS, CPLEX, Docker, Git, CI/CD, AWS, PostgreSQL, FAISS

AWARDS & SCHOLARSHIPS

- **Young Researcher, Heidelberg Laureate Forum Foundation** 2025
- **Richard E. Merwin Student Scholarship by IEEE Computer Society** 2023
- **Best Research Assistant, Graduate School of Engineering and Science, Ozyegin University** 2022

- **Second Best Paper**, 18th European Conference on Multi-Agent Systems 2021
- **2nd Place**, Supply-Chain Management League (Standard & Collusion Track), IJCAI 2021
- **1st Place**, IBM Watson's & RPI's Human Multi-Agent Immersive Negotiation Challenge, IJCAI 2020
- **MSc Research Scholarship**, The Scientific & Research Council of Turkey 2020 - 2023
- **Graduate Fellowship**, Graduate School of Engineering and Science, Ozyegin University 2020 - 2024
- **Research Experiences for Undergraduates (REU) Scholarship**, National Science Foundation (NSF), USA 2018

TEACHING ASSISTANTSHIP

- **CS 551**: Introduction to Artificial Intelligence (Graduate Course) Spring 2021, 2022, 2023 & Fall 2022
- **SEC 405**: Artificial Intelligence: Impact on Humanity, Society, and Business Spring 2021 & 2023
- **CS 202**: Database Management Systems Spring 2022
- **CS 103**: Introduction to Computer Programming Fall & Spring 2020

ACADEMIC SERVICE

- **Program Committee**: AAMAS'26 | **Reviewer**: AAMAS'21/24/25, ECAI'23, & EUMAS'21
- **Secretary & Board Member**, IEEE Computer Science Society Turkey Chapter 2023 - 2025
- **Organizer**, 14th Automated Negotiating Agents Competition (ANAC) at AAMAS 2023
- **Conference Volunteership**: IJCAI (2021-2022), AAMAS (2021), ACII (2021) & EUMAS (2021) 2021 - 2022
- **Committee Member**, 7th Turkish Science Academy Machine Learning Summer School 2022

PUBLICATIONS (U: UNDER REVIEW, J: JOURNAL, C: CONFERENCE)

- [U2] - **Conformal Nash Orchestration: Safe Model Predictive Control of Time-Series Foundation Models in Automated Negotiation**, M.O. Keskin, E. Kuru, R. Aydođan, 2025.
- [U1] - **IRouterLM - Adaptive Query Routing for Multimodal RAG**, E. Kuru, M.O. Keskin, 2025.
- [J4] - **Taking into Account Opponent's Arguments in Human-Agent Negotiations**, A. Dođru, M.O. Keskin & R. Aydođan, 2024, ACM Transactions on Interactive Intelligent Systems.
- [J3] - **Decentralized Multi-Agent Path Finding Framework and Strategies Based on Automated Negotiation**, M.O. Keskin, F. Canturk, C. Eran & R. Aydođan, 2024, Autonomous Agents and Multi-Agent Systems.
- [J2] - **Conflict Based Negotiation Strategy for Human-Agent Negotiation**, M.O. Keskin, B. Buzcu & R. Aydođan, 2023, Applied Intelligence, Springer.
- [J1] - **Would You Imagine Yourself Negotiating With a Robot, Jennifer? Why Not?**, R. Aydođan, M.O. Keskin & U. akan, 2022, IEEE Transactions on Human-Machine Systems.
- [C9] - **Evaluating Modern RAG: Textual, Multimodal, Dense, and Late Interaction Pipelines**, E. Kuru, M.O. Keskin, 2025, International ACM SIGIR Conference on Research and Development in Information Retrieval, Workshop on Information Retrieval's Role in RAG Systems.
- [C8] - **An Adaptive Emotion-Aware Strategy for Human-Agent Negotiation: Insights from Real-World Human-Robot Experiments**, M.O. Keskin, U. akan, & R. Aydođan, 2025, ACM International Conference on Intelligent Virtual Agents.
- [C7] - **NEGOTIATOR: A Comprehensive Framework for Human-Agent Negotiation Integrating Preferences, Interaction, and Emotion**, M.O. Keskin, B. Buzcu, B. Koyigit, U. akan, A. Dođru & R. Aydođan, 2024, International Joint Conference on Artificial Intelligence.
- [C6] - **NegoLog: an integrated python-based automated negotiation framework with enhanced assessment components**, A. Dođru, M.O. Keskin, C.M. Jonker, T. Baarslag, & R. Aydođan, 2024, International Joint Conference on Artificial Intelligence.
- [C5] - **You Look Nice, but I Am Here to Negotiate: The Influence of Robot Appearance on Negotiation Dynamics**, M.O. Keskin, S. Akay, A. Dođan, B. Koyigit, J. Kanero, & R. Aydođan, 2024, Companion of the ACM/IEEE International Conference on Human-Robot Interaction.
- [C4] - **Effects of Agent's Embodiment in Human-Agent Negotiations**, U. akan, M.O. Keskin & R. Aydođan, 2023, ACM International Conference on Intelligent Virtual Agents.
- [C3] - **Time Series Predictive Models for Opponent Behavior Modeling in Bilateral Negotiations**, G. Yesevi, M.O. Keskin, A. Dogru & R. Aydođan, 2022, International Conference on Principles and Practice of Multi-Agent Systems.
- [C2] - **[Second Best Paper], A Decentralized Token-Based Negotiation Approach for Multi-Agent Path Finding**, C. Eran, M.O. Keskin, F. Canturk, & R. Aydođan, 2021, European Conference on Multi-Agent Systems.
- [C1] - **Solver Agent: Towards Emotional and Opponent-Aware Agent for Human-Robot Negotiation**, M.O. Keskin, U. akan, & R. Aydođan, 2021, International Conference on Autonomous Agents and Multi-Agent Systems.