

CURRICULUM VITAE

1. **Family name:** HAKLIDIR
2. **First names:** Mehmet
3. **Nationality:** Turkish
4. **Civil status:** Married
5. **Education:** PhD

Institution [Date from – Date to]	Degree(s) or Diploma(s) obtained:
Istanbul Technical University, Turkey, Graduate School of Science, Engineering And Technology	Ph.D., Department of Control and Automation Engineering (3.80/4 GPA) Thesis: Deep Reinforcement Learning for POMDPs
Istanbul Technical University, Turkey, Graduate School of Science, Engineering And Technology	M.Sc., Department of Mechatronics Engineering (3.38/4 GPA) Thesis: Modelling of Sonobuoy for Position Estimation
Istanbul University, Turkey Faculty of Engineering	B.Sc., Department of Mechanical Engineering (3.34/4 GPA)

6. **Language skills:** Indicate competence from A1 to C2 (A1 - beginner; C2 - proficient)

Language	Reading	Speaking	Writing
Turkish (Native)	Mother Tongue		
English	C2	C2	C2
German	B2	B2	B2

7. **Membership of professional bodies:** OECD One AI Expert Group, Membership; The Global Partnership on Artificial Intelligence (GPAI), Observer; The European AI Alliance, Membership; Intergovernmental Meeting related to the draft Recommendation on the Ethics of Artificial Intelligence, Member State Turkey; IRCAI - UNESCO International Research Centre on Artificial Intelligence, National Contact Point; Presidency of the Republic of Turkey the Science, Technology and Innovation Policies Council, Membership of Artificial Intelligence Technologies Roadmap Advisory Board; Presidency of the Republic of Turkey the Science, Technology and Innovation Policies Council, Membership of Cloud Computing and Big Data Technologies Roadmap Advisory Board; TAI/TUSAŞ, Membership of Technology Advisory Board; Mechatronics Engineering in Yıldız Technical University, Membership of Advisory Board;
8. **Other skills:** (e.g. Computer literacy, etc.): **Programming Languages:** C/C++, Matlab, Python, Java, Prolog, Lisp, Big Data Tools: Hadoop, Spark, Spark MLlib, MapReduce, Hive, Kafka, Nifi, Hbase, Sqoop, **Deep learning/Machine learning frameworks:** PyTorch, TensorFlow, Caffe and Keras, **Application Programs:** Matlab-Simulink, Labview, Modelica, Dymola, MAK Technologies (VR-Forces, VR-Link, MAK RTI), CVS, UML Tools, Enterprise Arch., DOORS, Jira, Catia, AutoCAD, ArcView, Surfer, SmarTeam, Visio, Agile Development Methodologies (Scrum), Knowledge on Data Sources (Cloud systems, NoSql Database, SQL Server) and Data Exchange Technologies (CSV, JSON). **Trainings received and Certificates:** 2016 June, Kocaeli, Project Management PMP, TUSSIDE; 2015 April, Kocaeli, Project Management Using Microsoft Project, Istanbul Kurumsal Gelism; 2014 April, Kocaeli, Performance Review Process and Feedback Management, CDC Corporate Development Center; 2014 March, Kocaeli, Business Ecosystem and Subcontractor Management, TEKIM; 2007 October, CMMI, Carnegie Mellon University; 2007 September, Bursa, **Simulink for System and Algorithm Modeling**, FIGES; 2006 November, Bursa, **Advanced MATLAB Programming Techniques**, FIGES; 2006 October, Antalya, **MATLAB Software Development Process**, FIGES; 2006 September, Kocaeli, **MAK VR-Forces Training Certificate, MAK Tech.** - Jeff Bail; 2006 May, Kocaeli, Introductory HLA, GTI6; 2005 September, Kocaeli, Object Oriented C++ Programming, Yucel Gunduz; 2005 September, Kocaeli, Object Oriented Analysis and Design Using UML, Yucel Gunduz; 2005 September, Kocaeli, Design Patterns, Yucel Gunduz
9. **Present position:** TUBITAK BILGEM Deputy Director, Head of Cloud Computing and Big Data Research Lab (B3LAB)
10. **Years within the firm:** 18 years
11. **Key qualifications:**
 - More than **19 years of general professional experience** gained in the private sector at first, followed by long-standing experience at a leading research and funding national agency working as project technical and team leader, Head of research lab and Deputy Director.
 - Highly experienced in managing the development efforts within **R&D projects of AI development team**, working as **data scientist, data engineer and machine learning engineer**; managing and coaching development of AI-based solutions by using **machine learning and deep learning techniques**
 - **More than 17 years of experience in application of digital technologies in project that serve the automotive, machinery and defence industries:** Big Data and Artificial Intelligence Team Leader for 3 years and Head of Cloud Computing and Big Data Research Laboratory for 2 years, working on establishment and implementation phase and later management of the TUBITAK BILGEM Cloud Computing and Big Data Research Laboratory (B3LAB – www.b3lab.org) – an innovation center that provides digital transformation/Industry 4.0 services with focus on research in Cloud Computing and Big Data, provision of training and consultancy in these technologies to the machinery/automotive industries; 10 years of experience leading two large-scale R&D projects for submarine simulations; involved in 4 EU Horizon 2020 research and innovation projects targeting digital transformation of automotive industry actors.
 - Proven track record in **preparation of feasibility studies and maturity assessments for digital transformation serving machinery and automotive sectors:** contributed to the design of digital transformation and especially AI maturity assessment methodology; Managed a feasibility and proof of concept study for Arçelik in 2018, using machine learning techniques for development of a test model; managed a feasibility study related to digital technologies serving machinery and automotive industry, enabling SMEs and industrial organizations to receive smart production technologies (cloud computing, big data, artificial intelligence, digital twin)
 - **Worked on the establishment of the National AI Institute** (yze.bilgem.tubitak.gov.tr) and developing Türkiye's strategic vision for AI.
 - Deep experience on **Main Machine Learning Algorithms** (Bayesian networks, Clustering, k-NN, Random Forest) and Advanced Machine Learning Techniques (RNN, CNN, LSTM, Supervised Learning, Unsupervised Learning, Reinforcement Learning), Deep learning/Machine learning frameworks (TensorFlow, Keras and PyTorch)
 - Extensive experience in **Big Data Architecture Assessment and Design, Big Data Tools and Advanced Analytical Modeling**.
 - Extensive knowledge and hands-on experiences on **Big Data Projects, Cloud Computing Projects, Agile Development Methodologies** (Scrum)
 - International and national project co-operation and management experience

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12. Professional experience

Ref	Date	WD	Location	Company & ref person	Position	Description
1	Apr 2022-	59	Kocaeli /Türkiye	TÜBİTAK BİLGEM, BTE	Deputy Director	At Information Technologies Institute (BTE) manages 3 divisions: Cloud Computing and Big Data Research Lab ; Data Valorisation Division ; Image Processing and Speech & Language Technologies ; Software Development Department
2	June 2022 - Ongoing	20	Kocaeli-Türkiye	TÜBİTAK BİLGEM EU Horizon Europe Project, RINA , Olçay Öztanır olcay.oztanir@tubitak.gov.tr	Technical Leader	FlexIndustries : The project builds upon a holistic multi-disciplinary (device, process and value-chain) and multi-scale(operating, tactical and strategic) approach fostering its 7 multi-sector(automotive, biofuels, polymers, steel, pulp & paper, pharmaceuticals, cement) energy intensive industries design and deploy the most suitable Energy Efficiency Measures and Process Flexibility Methods for their industrial environments Needs and investment focus of the SMEs for manufacturing have been considered and some solutions and platforms were proposed for them. In this project, a digital twin of the energy model will be created for the energy need of the paintshop at the Ford Otosan factory as a use case . Tasks : Manage the system team to setup cloud and big data platforms ; Manage and coach the research team that meets agreed objectives and creates a digital twin of the energy model; Manage the design, development, implementation and test activities of the project; Develop AI-based energy management and optimal process planning algorithms by using machine learning and deep learning techniques.
3	October 2021 – Apr 2022	60	Kocaeli-Türkiye	TÜBİTAK BİLGEM EU ECSEL Project, ST , Dr. Hatun Çinkaya Yılmaz hatun.yilmaz@tubitak.gov.tr	Artificial Intelligence Team Leader	StorAlge aims to develop and industrialize FDSOI 28nm and next generation embedded Phase Change Memory (ePCM) world-class semiconductor technologies enabling competitive Artificial Intelligence for Edge applications . TÜBİTAK BİLGEM has two use-cases : “ Automated & Teleoperated vehicles (UGV and excavator) with AI Algorithms and sensors integration and Task Control Station ” use-case; “ Integration of AI algorithm to the washing machine software stack ”. Tasks : Orchestrate the development efforts of AI development team, which includes working as a data scientist, data engineer and machine learning engineer; Manage the design, development, implementation and test activities of the project; Manage and coach to develop AI-based energy management and optimal process planning algorithms by using machine learning and deep learning techniques and to implement edge AI solutions; Manage and coach to the team to develop and implement AI-based Path Planning, Swarm Intelligence ; as part of Capacity Building delivery of trainings on artificial intelligence, machine learning and deep learning . Demonstration partners of the project are enterprises from the automotive and telecommunication industry
4	July 2020 -		Kocaeli-Türkiye	European Union, EU H2020 Project, DFKI , Paul Lukowicz paul.lukowicz@dfki.de	Project Manager/ Technical Expert	HumanE-AI-Net - https://www.humane-ai.eu/ : The HumanE AI Network will leverage the synergies between the involved centers of excellence to develop the scientific foundations and technological breakthroughs needed to shape the AI revolution in a direction that is beneficial to humans both individually and societally, and that adheres to European ethical values and social, cultural, legal, and political norms. The aim is to facilitate AI systems that enhance human capabilities and empower individuals and society as a whole while respecting human autonomy and self-determination. Tasks : Project management
5	June 2020 – April 2022	30	Kocaeli-Türkiye	TÜBİTAK BİLGEM EU ECSEL Project, Infineon Technologies , Olçay Öztanır olcay.oztanir@tubitak.gov.tr	Technical Leader	Adacorsa develops sensor and communication technologies for drones to give drones the chance of being safe and efficient “elements” for observation, analysis, or transport in an extended out of line-of-sight operation range. Tasks : Orchestrate the development efforts of artificial intelligence development team, which includes working as a data scientist, data engineer and machine learning engineer; Manage the design, development, implementation and test activities of the project; Manage and coach to the team to develop and implement AI-based path planning, task planning and scheduling . Demonstration partners of the project are enterprises and SMEs from the automotive, aerospace and telecommunication industry: Ford Otosan, Türk Havacılık ve Uzay Sanayii (TAI), Büyütech, Robonik Mekatronik Teknolojileri .
6	July 2020 – April 2022		Kocaeli-Türkiye	TUBİTAK BİLGEM, Ministry of Trade, Turkey Dr. Ali Görçin ali.gorcin@tubitak.gov.tr	Artificial Intelligence Team Leader	National X-Ray Scan Network and Image Analysis Project To ensure national customs security at the highest level by monitoring and preventing illegal trafficking of vehicles, travelers and goods, we will develop a common image manipulation software for x-ray images acquired from 3 different vendors and deep learning aided anomaly detection over x-ray scans and operator decision support. Tasks : Orchestrating the development efforts of artificial intelligence development team, which includes data scientist and machine learning engineer. Development and implementation machine learning and deep learning models
7	Jan 2020 -		Kocaeli-Türkiye	TUBİTAK BİLGEM BTE Turkish Statistical Institute (TUIK), Turkey Dr. Ali Görçin ali.gorcin@tubitak.gov.tr	Big Data and Artificial Intelligence Team Leader	Turkish Statistical Institute (TUIK) Big Data and Advanced Analytics Project The estimation of inflation indices such as the WPI [Wholesale Price Index] and CPI [Consumer Price Index] as well as the determination of indicators in determining these indices in the big data ecosystem as batch and streaming data labeled with category and sub-category information provided by web crawling and other sources from different stores. Taking advantage of machine learning and deep learning within the scope of this study, both forecast inflation and determine the most accurate indicator products that should be selected in the basket for the best inflation forecast using AI techniques. Tasks : Orchestrating the development efforts of a big data and artificial intelligence development team, which includes data scientist, data engineer and machine learning engineer. Big Data Architecture Assessment and Design. Development and implementation machine learning, deep learning and advanced analytical models.

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8	Mar 2019 – Mar 2022		Kocaeli-Türkiye	European Union, EuropeAid/139188/IH/SE R/TR, Ministry of Trade, Turkey Dr. Ali Görçin ali.gorcin@tubitak.gov.tr	Big Data and Artificial Intelligence Team Leader/ Technical Expert	Project of Data Governance Tool Development for Turkish Customs - https://www.cedetect.com/ : To strengthen the customs surveillance and control function of the Ministry of Trade (MoT) all across Turkish Customs Territory by increasing its administrative, technical and operational capacity and by strengthening the structure of Customs Enforcement Coordination Center (CECC) utilizing a data governance tool development based on big data technologies and machine learning algorithms. Tasks: Orchestrating the development efforts of a big data and artificial intelligence development team, which includes data scientist, data engineer and machine learning engineer. Big Data Architecture Assessment and Design. Development and implementation machine learning, deep learning and advanced analytical models.
9	Nov 2018- Sept 2022	120	Kocaeli-Türkiye	European Union, EU H2020 Project, Ertico, Rita Bhandari r.bhandari@mail.ertico.com	Technical Leader	5G-MOBIX will develop and test automated vehicle functionalities using 5G core technological innovations along 2 cross-border corridors and 6 urban trial sites. Demonstration partners with TÜBİTAK BİLGEM in this project are enterprises from the automotive and mobile communication industry . In the trial, potential usage of 5G networks for cloud assisted connected and autonomous mobility solution was demonstrated with preliminary field tests of Autonomous Truck Routing use case. The preliminary tests were performed at Ford Otosan test track in Eskişehir , Tasks: Orchestrate the development efforts of the AI development team, which includes working as a data scientist, robotics engineer and machine learning engineer; Orchestrate the development efforts of the cloud computing team; Manage the design, development, implementation and test activities of the project; Manage the cloud computing team to setup cloud infrastructure .
10	Sept. 2020-present	670	Kocaeli-Türkiye	TUBITAK BILGEM BTE ali.gorcin@tubitak.gov.tr	Head of Cloud Computing and Big Data Research Laboratory	<ul style="list-style-type: none"> - Oversee all projects simultaneously; responsible for all projects, from initial identification, investigation and concept development to delivering cost-effective useable solutions; Manage national and international capacity-building projects in the digital transformation field (IoT, cloud computing, big data and artificial intelligence, digital twin), smart manufacturing, reorganization, and restructuring of public organizations and SMEs; manage, coach and develop a high-performing research team, ensure research into new and existing processes, devices, technologies and techniques, plan and coordinate activities to support and cooperate with companies that request projects, consultancy and training on digital transformation/Industry 4.0, prepare grant proposals for national and international projects(TÜBİTAK, EU Horizon, etc.); Lead patent and scientific publications, design and prepare trainings, training deliverables (including the training tools, kits and materials). - As member of Artificial Intelligence Technologies Roadmap Advisory Board and Cloud Computing and Big Data Technologies Roadmap Advisory Board, actively contributed to develop Turkey Artificial Intelligence Technologies Roadmap and Turkey Cloud Computing and Big Data Technologies Roadmap. - Contributed to a study on the establishment of a data space for the Turkish manufacturing industry prepared by the main stakeholders involved directly or indirectly in the digital transformation of Türkiye (Digital Transformation Office, Presidency of Strategy and Budget, Ministry of Industry and Technology, Ministry of Trade, KOSGEB) - Supported the “Accelerating Digital Transformation in Industry with Industrial IoT for Small and Medium-Sized Enterprises” Project carried out by the Fourth Industrial Revolution Center of Turkey established by MESS Turkish Employers' Association of Metal Industries - Actively contributed to developing “The OECD Framework for the Classification of AI Systems,” prepared by the OECD ONE AI Expert Group. - Between March 2021-July 2022 (220 w/d) managed a feasibility study related to digital technologies serving machinery and automotive industry, enabling SMEs and industrial organizations to receive smart production technologies (cloud computing, big data, artificial intelligence, digital twin) as a service in return for economic costs with a pay-as-you-go business model. - Between Sept. 2019-April 2022 (90 w/d) managed the establishment of the National AI Institute and actively contributed to developing Türkiye’s strategic vision for AI. It is the 1st institute established within TÜBİTAK centers and institutes, currently operates under five competency centers, with focus on Intelligent Manufacturing Systems and Smart Manufacturing serving automotive and machinery industry. In the establishment phase, Dr. Haklıdır actively contributed to the design of digital transformation and especially AI maturity assessment methodology for industry, especially the machinery and automotive.

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Ref	Date	WD	Location	Company & ref person	Position	Description
11	Oct 2017 –August 2020	900	Kocaeli-Türkiye	TUBITAK BILGEM BTE Ministry of Development, Dr. Ali Görçin ali.gorcin@tubitak.gov.tr	Big Data and Artificial Intelligence Team Leader	Cloud Computing and Big Data Research Laboratory (B3LAB) project aims to provide the necessary ground for the formation of infrastructure in Cloud Computing and Big Data. Cloud Computing and Big Data technologies manage the vast amount of data produced by various resources and provide cost and workforce efficiency by centralizing the online services. B3LAB, established as innovation center that provides digital transformation/Industry 4.0 services, is focused on research in Cloud Computing and Big Data, and aims to provide training and consultancy in these technologies to the concerned institutions, including in the machinery/automotive industries. B3LAB develops solutions for manufacturing, automotive and machine industry (eg. Arçelik A.Ş., Ford Otosan, IQVizyon (SME), ASELSAN, MEXT Teknoloji Merkezi). Tasks: Managing the establishment and implementation phase of the (B3LAB); Orchestrating the development efforts of a big data and AI development team, which includes working as a data scientist, data engineer and machine learning engineer for big data and artificial intelligence software tools, Safir Büyük Veri (Safir Big Data) and Safir Zeka (Safir Intelligence), which offers big data storage, data transfer and analytics, Machine Learning as a Service; Big Data Architecture Assessment and Design, Developing and implementing machine learning, deep learning and advanced analytical models, Designing and preparing trainings (Data Science, Big Data and Advanced Analytics, Digital Twin, Decision Making for Self-Driving Cars, Decision Making under Uncertainty, Artificial Intelligence, Machine Learning, Deep Learning), training deliverables (including the training tools, kits and materials) Managed a feasibility and proof of concept study for Arçelik in 2018 (45 w/d): This study was conducted within the scope of the Advanced Analytics Project for Refrigerator LPT tests with Arçelik Production Technologies Directorate Quality Management & Six Sigma department. Using machine learning model was developed allowing reducing the total test time.
12	May 2016 – Sept. 2017	220	Kocaeli-Türkiye	TÜBİTAK BİLGEM Dr. Ali Görçin ali.gorcin@tubitak.gov.tr	Chief Researcher in an autonomous driving research study	Study aimed to develop efficient algorithms for autonomous driving to help more accurately and effective self-drive the car in as much real time as possible, utilizing deep learning to understand the road scene and make decision as an AI. The majority of experiments were conducted within a driving simulator, and the model was generalized to real-world cases reasonably well. Tasks:Algorithm design and development and software implementation for autonomous driving ; Implementation deep learning-based vehicle detection and lane detection algorithms; Setup simulation workbench; Generalization and realization of the developed method
13	May 2005-Jun 2015	2400	Kocaeli-Türkiye	TUBITAK BILGEM BTE Ministry of Development, Turkey Dr. Ali Görçin ali.gorcin@tubitak.gov.tr	Team Leader/ Leader System Engineer	Team Leader in Submarine Tactical Simulator Project (DATAS): shore-based computerized Submarine Tactical Training Simulation System. DATAS facilitates defence and attack operations against computer generated forces which are simulated as realistic target platforms with artificial intelligence. Leader System Engineer in Torpedo Countermeasure System Simulation Project (DAKA-Y) aiming to develop a modeling and simulation tool for decoy and jammer release and evasive maneuvers for submerged and floating platforms. Tasks: Orchestrate the development efforts of a software development team, incl. software engineers, algorithm developers and system engineers; Manage design, development, implementation and test activities; Manage R&D activities-Algorithm design and development and software implementation for complex systems, Modelling and simulation of the dynamic platforms (Submarine, AUV, Surface Ship, Torpedo, Aircraft, Helicopter, Gun Fire, Sonobuoy), Design controller of the platform by using control theory ranging from modern control to advanced control techniques (Robust/Nonlinear/Adaptive control/Optimal Control theory / Real-Time Control Systems /Fuzzy, LQR, Sliding Mode, Feedback Linearization, MPC, NN), Design and development guidance and autonomous navigation algorithms for torpedo, decoy, submarine, AUV); Prepare requirements from high level system requirements; Prepare systems engineering and project management related documentation. Managed a research study to become manufacturing processes more efficient and reliable by using industrial robots for machinery/automotive industry (220 working days): in this study, the first three links of Mitsubishi RV-2AJ Industrial Robot, have been modeled and simulated by using Dymola. Kinematic equations have been obtained and mathematical model of this system has been formed by using Lagrange's Equations.
14	Aug2001 -Jul 2003	Full-time	İstanbul	BOSCH Türkiye	Assistant Product Manager/ Engineer	Responsible for Marketing, Data Analysis and reporting, Project Management, SAP Key User; Responsible engineer in a special project in Research and Development Department
TOTAL W/D		4983 W/Ds				

13. Other relevant information: Academic Background:

Publications:

- Article (SCI Index): Gorcin Karaketir, S., Luleci, N. E., Eryurt, M.A., Emecen, A., **Haklidir, M.**, Hidiroglu, S. 2022. "Overweight and Obesity in Preschool Children in Turkey: A Multilevel Analysis", *Journal of Biosocial Science*, 1-23. doi:10.1017/S0021932022000025.
- Article (SCI Index): **Haklidir, M.** and Temeltas, H. 2021. "Guided Soft Actor Critic: A Guided Deep Reinforcement Learning Approach for Partially Observable Markov Decision Processes," in *IEEE Access*, vol. 9, pp. 159672-159683, 2021, doi: 10.1109/ACCESS.2021.3131772.
- Ozbilen M.L., Egriboz E., Halepmollasi R., Bilgen I., **Haklidir M.** 2021. "Deep Reinforcement Learning for Simulation-Based Determination of COVID-19 Pandemic Mitigation Policies". *Artificial Intelligence Theory and Applications*, Volume: 1, Number:3, Pages 30-39. ISSN: 2757-9778, ISBN: 978-605-69730-2-4
- Halepmollasi, R., Zeybel, M., Eyvaz, E., Arkan, R., Genc, A., Bilgen, I., **Haklidir, M.** 2021. "Towards Federated Learning in Identification of Medical Images: A Case Study", *Artificial Intelligence Theory and Application*, Volume: 1, Number:2 (Special Issue), Pages 30-39. ISSN: 2757-9778, ISBN: 978-605-69730-2-4
- Dervisoglu, H., Bilgen, I., Halepmollasi, R., Can, B., **Haklidir, M.** 2021. "Unfairness of Deep Learning Methods Arising Gender Bias in Covid-19 Diagnosis of Medical Images", *Artificial Intelligence Theory and Application*, Volume: 1, Number:2 (Special Issue), Pages 81-94. ISSN: 2757-9778, ISBN: 978-605-69730-2-4
- Article (SCI Index): Akbayrak, I., Caglayan, S. I., Durdagi, S., Kurgan, L., Uversky, V., Ulver, B., Dervisoglu, H., **Haklidir, M.**, Hasekioglu, O., Coskuner-Weber, O. "Structures of MERS-CoV Macro Domain in Aqueous Solution with Dynamics: Impacts of Parallel Tempering Simulation Techniques and CHARMM36m and AMBER99SB Force Field Parameters". *Proteins: Structure, Function, and Bioinformatics*. May 18, 2021. DOI: <https://doi.org/10.1002/prot.26150>
- Article (SCI Index): Haklidir Tut, F.S., **Haklidir, M.** 2020. "Prediction of geothermal originated boron contamination by deep learning approach: at Western Anatolia Geothermal Systems in Turkey", *Environmental Earth Sciences*, 79:180
- Article (SCI Index): Haklidir Tut, F.S., **Haklidir, M.** 2019. " Prediction of Reservoir Temperatures Using Hydrogeochemical Data, Western Anatolia Geothermal Systems (Turkey): A Machine Learning Approach". *Natural Resources Research*, 1-14.
- Article (SCI Index): Tut Haklidir, FS, **Haklidir, M.** 2017. "Fuzzy control of calcium carbonate and silica scales in geothermal systems", *Geothermics*, v. 70, p. 230-238
- Article (SCI Index): **Haklidir, M.**, Tasdelen, I. 2009. "Modeling, Simulation and Fuzzy Control of an Antropomorphic Robot Arm by Using Dymola", *Journal of Intelligent Manufacturing*: Volume 20, Issue2, Page 177.
- **Haklidir, M.** and Tut Haklidir, F.S. 2009. "The possibilities for hydrogen production from H2S and storage in the Black Sea", *International Journal of Nuclear Hydrogen Production and Applications*, Vol. 2, No. 1, pp. 78 - 85.

Proceedings:

- Dervisoglu, H., Ulver, B., Arkan Yurtoglu, R., Halepmollasi, R., **Haklidir, M.**, "A Comparative Study on Cloud-based and Edge-based Digital Twin Frameworks for Prediction of Cardiovascular Disease", 9th International Conference on Information and Communication Technologies for Ageing Well and e-Health (ICT4AWE 2023), Prag, Czech Republic, 22-24 April 2023.
- Sengun, B., Iscan, Y., Tataroglu Ozubulak, G.A., Kumbasar, N., Egriboz, E., Sormaz, I.C., Aksakal, N., Deniz, S.M., **Haklidir, M.**, Tunca, F., Giles, Y., "Artificial Intelligence in Minimally Invasive Adrenalectomy: Recognition of the Left Adrenal Vein Using Deep Learning", (In Turkish) 11th Turkish National Endocrine Surgery Congress, Antalya, Turkiye, 16-19 March 2023.
- Deniz, S.M., Javaheri, H., Vargan, J.F., Urgun, D., Sabit, F., Tok, M., **Haklidir, M.**, Zhou, B. and Lukowicz, P., "Prediction of Lifted Weight Category Using EEG Equipped Headgear", In 2022 IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI) , Greece, 27-30 September 2022.
- Sari, T., Sever, M., Candan, A. T., Girgin, E., Cibuk Girgin, G. T., **Haklidir, M.**, "Cloud Assisted Connected and Automated Mobility System Architecture Design and Experimental Verification: The 5G-MOBIX Autonomous Truck Routing Use Case", *33rd IEEE Intelligent Vehicles Symposium*, Aachen, Germany, 5-9 June 2022.
- **Haklidir, M.**, Temeltas, H., "Autonomous Driving Systems for Decision-Making Under Uncertainty Using Deep Reinforcement Learning", *30th Signal Processing and Communications Applications Conference (SIU) (pp. 1-4). IEEE, 2021.*
- Haklidir Tut, F.S., **Haklidir, M.**, "The Reservoir Temperature Prediction Using Hydrogeochemical Indicators by Machine Learning: Western Anatolia (Turkey) Case". *World Geothermal Congress 2021*, Reykjavik, Iceland, May 2021.
- Ozbilen, M. L., Egriboz, E., Halepmollasi, R., Bilgen, I., **Haklidir, M.**, "A Deep Reinforcement Learning Approach to Explore Optimal Policies for Covid-19 Pandemic Mitigation: Preliminary Analysis", II. International Artificial Intelligence in Health Congress, Izmir, Turkey, 16-18 April 2021.
- Halepmollasi, R., Zeybel, M., Eyvaz, E., Arkan, R., Genc, A., Bilgen, I., **Haklidir, M.**, "Towards Federated Learning in Identification of Medical Images: A Case Study", II. International Artificial Intelligence in Health Congress, Izmir, Turkey, 16-18 April 2021.
- Dervisoglu, H., Bilgen, I., Halepmollasi, R., Can, B., **Haklidir, M.**, "Unfairness of Deep Learning Methods Arising Gender Bias in Covid-19 Diagnosis of Medical Images", II. International Artificial Intelligence in Health Congress, Izmir, Turkey, 16-18 April 2021.
- Haklidir Tut, F.S., **Haklidir, M.**, "The Fluid Temperature Prediction with Hydro-geochemical Indicators Using a Deep Learning Model: A Case Study Western Anatolia (Turkey)". *43rd Workshop on Geothermal Reservoir Engineering Stanford University, CA, February 11-13-2019.*
- **Haklidir, M.**, Haklidir Tut, F.S., "Fuzzy Control of Calcium Carbonate and Silica Scales in Geothermal Systems", *Proceedings of World Geothermal Congress, Melbourne-Australia, 19-24 April 2015.*
- Aldogan, D., Senyurek, L., **Haklidir, M.**, "Modeling and Simulation of Land Avoidance Behavior Belonging to Tactical Entities within a High Fidelity Simulation Environment", *23rd European Modeling and Simulation Symposium (EMSS 2013)*, Athens, Greece, September 25-27, 2013.
- Aldogan, D., **Haklidir, M.**, Eroglu, O., Franko, S., Timar, Y., Güven, A.F., Senyurek, L., Genc, H.M., "Anti-Submarine Warfare Modeling and Simulation", *23rd European Modeling and Simulation Symposium (EMSS 2013)*, Athens, Greece, September 25-27, 2013.
- Ulug, U., Güven, A.F., Franko, S., **Haklidir, M.**, Sari, N., Gurbuz, M., Ozkan, U., "Case-Space Model Approach in Decision Support Systems", (In Turkish) USMOS 2013 (National Defence Simulation and Modelling Symposium) Middle East Technical University, Ankara, 11-12 June 2013.
- Aldogan, D., **Haklidir, M.**, Senyurek, L., Timar, Y., Franko, S., Eroglu, O., Güven, A.F., Genc, H.M., "Modeling and Simulation of Anti-Submarine Warfare", (In Turkish) USMOS 2013 (National Defence Simulation and Modelling Symposium) Middle East Technical University, Ankara, 11-12 June 2013.

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- **Haklidir, M.**, Franko, S., Guven, A.F., Ulug, U., "Decision Support System for Torpedo Threats (DeSuS)", Ship Survivability Conference 2010, Berlin, Germany, October 2010. – The Winner of Ship Survivability Solution Award 2010.
- **Haklidir, M.**, Tut Haklidir, F., S., "Hydrogen Production from Geothermal Sources in Turkey", World Geothermal Congress 2010 (WGC 2010), Bali, Indonesia, 25-30 April 2010.
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