

## Prof. SUAT ÖZDEMİR

### Personal Information

**Email:** suatozdemir@hacettepe.edu.tr

**Web:** <https://avesis.hacettepe.edu.tr/15008>

### International Researcher IDs

ScholarID: 2x5qoTkAAAAJ

ORCID: 0000-0002-4588-4538

Publons / Web Of Science ResearcherID: D-8406-2012

ScopusID: 23467461900

Yoksis Researcher ID: 133668

### Education Information

Doctorate, Arizona State University, Computer Science and Engineering, Computer Science, United States Of America  
2001 - 2006

Postgraduate, Syracuse University, Computer Science and Engineering, Computer Science, United States Of America 1999  
- 2001

Undergraduate, Selcuk University, Faculty Of Engineering-Architecture, Turkey 1993 - 1997

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **DeepFogAQ: A fog-assisted decentralized air quality prediction and event detection system**  
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- II. **Road to efficiency: Mobility-driven joint task offloading and resource utilization protocol for connected vehicle networks**  
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- III. **Linguistic summarization of visual attention and developmental functioning of young children with autism spectrum disorder**  
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- IV. **Unveiling anomalies: a survey on XAI-based anomaly detection for IoT**  
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- V. **Smart meter-based energy consumption forecasting for smart cities using adaptive federated learning**  
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- VI. **Cepair: an AI-powered and fog-based predictive CEP system for air quality monitoring**  
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- VIII. **Computation Power and Energy Optimized Task Allocation in Internet of Things**  
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- X. **FogAI: An AI-supported fog controller for Next Generation IoT**  
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- XI. **QoS-aware IoT networks and protocols: A comprehensive survey**  
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- XII. **Fair and energy-aware IoT service composition under QoS constraints**  
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- XIII. **Ranking surgical skills using an attention-enhanced Siamese network with piecewise aggregated kinematic data**  
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- XIV. **Linking COVID-19 Perception With Socioeconomic Conditions Using Twitter Data**  
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- XVII. **QoE-Driven IoT Architecture: A Comprehensive Review on System and Resource Management**  
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- XIX. **HAFTA: Highly adaptive fault-tolerant routing algorithm for two-dimensional network-on-chips**  
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- XXI. **A deep learning-based CEP rule extraction framework for IoT data**  
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- XXII. **QoS-driven metaheuristic service composition schemes: a comprehensive overview**  
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- XXIII. **A review of heuristics and metaheuristics for community detection in complex networks: Current usage, emerging development and future directions**  
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- XXIV. **DeepMDP: A Novel Deep-Learning-Based Missing Data Prediction Protocol for IoT**  
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- XXV. **Fog computing-based privacy preserving data aggregation protocols**  
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- XXVII. **Security and Privacy in Medical Internet of Things and Cluster-Based Wireless Sensor Networks for Health Care**  
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- XXXI. **CDABC: chaotic discrete artificial bee colony algorithm for multi-level clustering in large-scale WSNs**  
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- XXXV. **Fuzzy Quantification and Opinion Mining on Qualitative Data using Feature Reduction**  
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- XXXVIII. **Reliable and energy efficient topology control in probabilistic Wireless Sensor Networks via multi-**

**objective optimization**

Khalil E. A., Ozdemir S.

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- XXXIX. **An Adaptive Vehicle Detection Algorithm Based on Magnetic Sensors in Intelligent Transportation Systems**  
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- XLI. **A Multi-objective Disjoint Set Covers for Reliable Lifetime Maximization of Wireless Sensor Networks**  
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- L. **Multi-Objective Evolutionary Algorithm Based on Decomposition for Energy Efficient Coverage in Wireless Sensor Networks**  
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- LII. **Application-specific topology generation algorithms for network-on-chip design**  
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- LIII. **Impacts of sensor node distributions on coverage in sensor networks**  
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- LV. **A Survey of Wormhole-based Attacks and their Countermeasures in Wireless Sensor Networks**  
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- LVIII. **A Survey of Payment Card Industry Data Security Standard**  
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## Articles Published in Other Journals

- I. **A comparative analysis on the reliability of interpretable machine learning**  
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- II. **Advancing affordable IoT solutions in smart homes to enhance independence and autonomy of the elderly**

- Akhmetzhanov B., Akhmetzhanov B., ÖZDEMİR S., Zhakiyev N.  
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- III. **A P4-assisted task offloading scheme for Fog networks: An intelligent transportation system scenario**  
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- IV. **TPS3: A privacy preserving data collection protocol for smart grids**  
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## Refereed Congress / Symposium Publications in Proceedings

- I. **Improved Chain-based Multi-Output Classification for Packaging Planning**  
Yildiz S. N., YILDIRIM OKAY F., Islamov A., ÖZDEMİR S.  
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- II. **Transforming Military Security: Quantum Age Blockchain Architecture for IoBT - PARS**  
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- III. **Narrowed Regions-based Bidirectional Path Planning Using RRT-Connect for Single Aircraft Missions**  
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- IV. **Linguistic Comparison of Children with and without ASD through Eye-Tracking Data**  
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- V. **Autonomous Micro-Grids: A Reinforcement Learning-Based Energy Management Model in Smart Cities**  
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- VI. **Dielectric Characterization of Ultrathin Softwear Flexible Substrates Intended for Wearable Biomedical Applications**  
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- VII. **A Novel Blockchain Based Decentralized Data Management Model for Swarm UAV Systems**  
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- VIII. **Towards Utilizing Unlabeled Data for Flood Forecasting with Weakly Supervised Adaptive Learning**  
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- IX. **Demonstration of Multi-Layer IoT Platform with QoS Support**  
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- X. **QNSGA-II: A Quantum Computing-Inspired Approach to Multi-Objective Optimization**  
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- XI. **Impact of Missing Data on Classification Success in Health and Comparative Analysis of Imputation Methods**  
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- XIII. **Sentiment Analysis for Turkish Unstructured Data by Machine Translation**  
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- XV. **SMOTE and Gaussian Noise Based Sensor Data Augmentation**  
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- XVI. **A New CEP-based Air Quality Prediction Framework for Fog based IoT**  
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- XVII. **Proposed Hybrid Attribute Selection Method on Financial Data Sets**  
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- XVIII. **Detection of Malicious Requests on Web Logs Using Data Mining Techniques**  
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- XX. **QoS Prediction Methods in IoT A Survey**  
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- XXIII. **Efficient and Secure Coverage Control in Internet of Things**  
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- XXIV. **CEP Rule Extraction from Unlabeled Data in IoT**  
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- XXV. **Comparative Analysis of IoT Communication Protocols**  
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- XXVI. **Applications of Stream Data Mining on The Internet of Things: A Survey**  
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- XXVII. **A Secure Data Aggregation Protocol for Fog Computing Based Smart Grids**  
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- XXVIII. **Steganography Application for UTF8 Encoded Texts**  
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- XXX. **Multi-Objective Virtual Machine Placement Optimization for Cloud Computing**  
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- XXXI. **Multi Sensor Based Indoor Positioning**  
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- XXXII. **A deep learning model for air quality prediction in smart cities**  
Kok I., Simsek M. U., Ozdemir S.  
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- XXXIII. **A Hybrid Approach for Improving the Classification Performance**



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**XXXIV. Traffic Delay Estimation With V2X Communication For An Isolated Intersection**

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**XXXV. Security in Internet of Things: A Survey**

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**XXXVI. Fuzzy Logic Based Traffic Surveillance System Using Cooperative V2X Protocols with Low Penetration Rate**

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**XXXVII. A Hybrid Trust Based Intrusion Detection System for Wireless Sensor Networks**

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**XXXIX. A Fog Computing Based Smart Grid Model**

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**XL. CDS Based Reliable Topology Control in WSNs**

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**XLI. Prolonging Stability Period of CDS Based WSNs**

Khalil E. A., Ozdemir S.

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**XLIII. Secure and Reliable Prediction Based Target Tracking for Wireless Sensor Networks**

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Akbas S., Efe M. A., Ozdemir S.

9th IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS), California, United States Of America, 26 - 28 May 2014, pp.327-332

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- XLVI. Secure Target Detection and Tracking in Mission Critical Wireless Sensor Networks**  
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8th IEEE International Conference on Anti-Counterfeiting, Security and Identification (ASID), Macau, China, 12 - 14 December 2014, pp.6-10
- XLVII. Energy Aware Evolutionary Routing Protocol with Probabilistic Sensing Model and Wake-Up Scheduling**  
Khalil E. A., Ozdemir S.  
IEEE Globecom Workshops (GC Wkshps), Georgia, United States Of America, 9 - 13 December 2013, pp.873-878
- XLVIII. Polynomial Regression Based Secure Data Aggregation for Wireless Sensor Networks**  
Ozdemir S., Xiao Y.  
54th Annual IEEE Global Telecommunications Conference (GLOBECOM), Texas, United States Of America, 5 - 09 December 2011
- XLIX. Functional Reputation Based Data Aggregation for Wireless Sensor Networks**  
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4th Annual IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WIMOB)/SecPriWiMob/SAUCEWiMob/HWN-RMQWiMob/STWiMob, Avignon, France, 12 - 14 October 2008, pp.592-597
- L. Secure and reliable data aggregation for wireless sensor networks**  
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- LI. Concealed data aggregation in heterogeneous sensor networks using privacy homomorphism**  
Ozdemir S.  
IEEE International Conference on Pervasive Services, İstanbul, Turkey, 15 - 20 July 2007, pp.165-166
- LII. Key establishment with source coding and reconciliation for wireless sensor networks**  
Ozdemir S., Cam H.  
25th IEEE International Performance Computing and Communications Conference, Arizona, United States Of America, 10 - 12 April 2006, pp.407-408
- LIII. Energy-efficient false data detection in wireless sensor networks**  
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Conference on Wireless Sensing and Processing, Florida, United States Of America, 17 - 18 April 2006, vol.6248
- LIV. Energy efficient link layer security solution for wireless LANs - art. no. 624108**  
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60th IEEE Vehicular Technology Conference, Los-Angeles, Chile, 26 - 29 September 2004, pp.4650-4654
- LVI. ESPDA: Energy-efficient and secure patternbased data aggregation for wireless sensor networks**  
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## Supported Projects

Özdemir S., Project Supported by Defense Industry, Improving WebRTC Security via Blockchain Technology, 2019 - 2021  
DESTEK A., ÖZDEMİR S., TUBITAK Project, Nesnelerin İnterneti İçin Sis Hesaplama Temelli Karmaşık Olay İşleme Ve

Değerli İçerik Çıkarımı, 2018 - 2021

Özdemir S., Tosun S., TUBİTAK Project, Yeniden Yapılandırılabilen YongaÜstü Ağlar, 2018 - 2020

## **Metrics**

Publication: 128

Citation (WoS): 1422

Citation (Scopus): 2132

H-Index (WoS): 20

H-Index (Scopus): 23

## **Non Academic Experience**

CIS ARGE

AIR Telekomünikasyon Çözümleri Ticaret Sanayi A.Ş.

Konneka

Siyah ARGE

TÜBİTAK-ULAKBİM