

## Lect. PhD ÇIĞDEM AVCI

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: JCN-7391-2023

ScopusID: 56611869000

### Biography

Responsibilities and tasks for the positions including and related to engineering, analysis, coordination, planning, product assurance, project management (PMO), and team leading have been carried out within the aerospace, aviation, and also in other fields. Combining the technical and executive experience gained, applied product assurance expertise in software systems considering the desired quality metrics and attributes while assessing the criticality and the expected performance. Conducted professional activities in international environments facilitating team or stakeholder interaction, communication, and the variations in the projects derived therefrom, with an approach tailored and customized for the business case while optimizing the provided software resources.

### Education Information

Doctorate, Wageningen Universiteit, WASS, Information Technology, Netherlands 2015 - 2024

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey 2010 - 2013

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey 2004 - 2010

### Research Areas

Information Systems, Communication and Control Engineering, Computer Sciences, Information Security and Reliability, Information System Reliability, Software Security, Database and Data Structures, Information Storage and Retrieval, Data Structures, Database Systems, Artificial Intelligence, Computer Learning and Pattern Recognition, Neural Networks, Software, Software Engineering

### Courses

Programming with Python for Engineers, Undergraduate, 2023 - 2024

Algorithms and Data Structures with Python, Undergraduate, 2023 - 2024

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

- I. **Design tactics for tailoring transformer architectures to cybersecurity challenges**  
Avci Ç., Tekinerdogan B., Catal C.  
CLUSTER COMPUTING-THE JOURNAL OF NETWORKS SOFTWARE TOOLS AND APPLICATIONS, vol.27, no.7,  
pp.9587-9613, 2024 (SCI-Expanded)
- II. **Analyzing the performance of long short-term memory architectures for malware detection models**  
Avci Ç., Tekinerdogan B., Catal Ç.  
CONCURRENCY AND COMPUTATION-PRACTICE & EXPERIENCE, vol.35, no.6, pp.1-0, 2023 (SCI-Expanded)
- III. **DOMAIN-DRIVEN DESIGN OF BIG DATA SYSTEMS BASED ON A REFERENCE ARCHITECTURE**  
Salma Ç., Tekinerdogan B., Athanasiadis I. N.  
SOFTWARE ARCHITECTURE FOR BIG DATA AND THE CLOUD, pp.49-68, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Software architectures for big data: a systematic literature review**  
Avci Ç., Tekinerdogan B., Athanasiadis I. N.  
Big Data Analytics, vol.5, pp.5, 2020 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Feature Driven Survey of Big Data Systems**  
Salma Ç., Tekinerdogan B., Athanasiadis I. N.  
International Conference on Internet of Things and Big Data (IoTBD), Rome, Italy, 23 - 25 April 2016, pp.348-355
- II. **Software Architecture of a Multimedia Data Management System**  
Salma Ç., Oguztuzun H., YAZICI A.  
International Conference on Multimedia Computing and Systems (ICMCS), Marrakech, Morocco, 14 - 16 April 2014,  
pp.530-535
- III. **IMA - An Adaptable and Dynamic Service Platform for Intermodal Mobility Assistance**  
Keiser J., Masuch N., Luetzenberger M., Grunewald D., Kern M., Trollmann F., Acar E., Salma Ç., Xuan-Thuy Dang X.  
D., Kuster C., et al.  
IEEE 17th International Conference on Intelligent Transportation Systems (ITSC), Qingdao, China, 8 - 11 October  
2014, pp.1521-1528
- IV. **Kullanım eslemesiyle mimari görünüşlerin drdelenmesi üzerine bir örnek çalışma**  
AVCI Ç., Oguztüzün H., YAZICI A.  
7th Turkish National Software Engineering Symposium, UYMS 2013, İzmir, Turkey, 26 September 2013, vol.1072

## Metrics

Publication: 8  
Citation (WoS): 21  
Citation (Scopus): 21  
H-Index (WoS): 3  
H-Index (Scopus): 3

## Representation and Promotion Activities

Institutional Representation, WADDEM, Turkey, Ankara, 2024 - 2024