# Lect. PhD ÇİĞDEM AVCI

#### **Personal Information**

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#### 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., Çatal 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. Kullanim eslemesiyle mimari görünümlerin drdelenmesi üzerine bir örnek çalisma AVCI Ç., Oşuztüzün 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