Asst. Prof. HAKAN KEKÜL

Personal Information

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Education Information

Doctorate, Firat University, Faculty Of Engıneerıng, Bilgisayar Mühendisliği, Turkey 2018 - 2022
Undergraduate, Sivas Cumhuriyet University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey 2017 - 2018
Postgraduate, Sivas Cumhuriyet University, Sosyal Bilimler Enstitüsü, Sayısal Yöntemler, Turkey 2010 - 2017
Undergraduate, Sakarya University, Faculty Of Technıcal Educatıon, Bilgisayar Sistemleri Öğretmenliği, Turkey 2002 - 2006

Dissertations

Doctorate, A New Method to Determine Scoring and Category of Software Vulnerabilities, Firat University, Faculty Of Engıneerıng, Department Of Computer Engıneerıng, 2022
Postgraduate, Comparison of Eigenfaces and Artificial Neural Networks in Face Recognition Applications, Sivas Cumhuriyet University, Sosyal Bilimler Enstitüsü, Sayısal Yöntemler, 2017

Research Areas

Software Security, Software Engineering

Academic Titles / Tasks

Assistant Professor, Sivas Cumhuriyet University, Teknoloji Fakültesi, Yazılım Mühendisliği Bölümü, 2023 - Continues

Courses

Cyber security, Undergraduate, 2022 - 2023
Data Structures, Undergraduate, 2023 - 2024
Software Security and Analysis, Postgraduate, 2023 - 2024
Programming Languages, Undergraduate, 2023 - 2024

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Estimating vulnerability metrics with word embedding and multiclass classification methods**
KEKÜL H., Ergen B., ARSLAN H.
International Journal of Information Security, vol.23, no.1, pp.247-270, 2024 (SCI-Expanded)

II. **A multiclass hybrid approach to estimating software vulnerability vectors and severity score**
Kekul H., ERGEN B., ARSLAN H.
JOURNAL OF INFORMATION SECURITY AND APPLICATIONS, vol.63, 2021 (SCI-Expanded)

Articles Published in Other Journals

I. **Comparison and Analysis of Software Vulnerability Databases**
Kekül H., ERGEN B., ARSLAN H.
International Journal of Engineering and Manufacturing(IJEM), vol.12, no.4, pp.1-14, 2022 (Peer-Reviewed Journal)

II. **A Multiclass Approach to Estimating Software Vulnerability Severity Rating with Statistical and Word Embedding Methods**
Kekül H., ERGEN B., ARSLAN H.
International Journal of Computer Network and Information Security, vol.14, no.4, pp.27-42, 2022 (Scopus)

III. **Estimating Missing Security Vectors in NVD Database Security Reports**
Kekül H., ERGEN B., ARSLAN H.
International Journal of Engineering and Manufacturing(IJEM), vol.12, no.3, pp.1-13, 2022 (Peer-Reviewed Journal)

IV. **Mikro Denetleyici Sistemler ile Türk İşaret Dili Kelime Çevirici**
Gökçe F., Kekül H.
Avrupa Bilim ve Teknoloji Dergisi, no.28, pp.972-977, 2021 (Peer-Reviewed Journal)

V. **Yazılım Güvenlik Açığı Veri Tabanları**
Kekül H., Ergen B., Arslan H.
Avrupa Bilim ve Teknoloji Dergisi, no.28, pp.1008-1012, 2021 (Peer-Reviewed Journal)

VI. **A New Vulnerability Reporting Framework for Software Vulnerability Databases**
Kekül H., Ergen B., Arslan H.
International Journal of Education and Management Engineering(IJEME), vol.11, no.3, pp.11-19, 2021 (Peer-Reviewed Journal)

VII. **Yüz Tanıma Uygulamalarında Özyüzler Ve Yapay Sinir Ağlarının Karşılaştırılması**
Kekül H., Bircan H., Arslan H.
Uluslararası Yönetim Bilişim Sistemleri ve Bilgisayar Bilimleri Dergisi, vol.2, no.1, pp.51-59, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **The Effect of Document Length on Machine Learning Success in Text-Based Data**
POLATGİL M., KEKÜL H.
2023 Innovations in Intelligent Systems and Applications Conference, Sivas, Turkey, 11 - 13 October 2023, pp.1-6

II. **Multi Purpose Security Analysis of Software Projects Against Cyber Threats and Development of Security Scoring Algorithms**
ŞEKER A., ARSLAN H., DELİBAŞ E., Kekül H.
2nd International Conference on Cyber Security and Digital Forensics (ICONSEC) 2022, Muğla, Turkey, 07 September 2022

III. **Systems Software Vulnerability Databases**
Kekül H., Ergen B., Arslan H.
1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021,

pp.971-972

IV. **Yazılım Güvenlik Açığı Veri Tabanları / Systems Software Vulnerability Databases**
KEKÜL H., ERGEN B., ARSLAN H.
1 st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.971-972

V. **Turkish Sign Language Word Converter with Micro Controller Systems**
Gökçe F., Kekül H.
1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.919-920

Supported Projects

Kekül H., Ergen B., TUBITAK Project, Yazılım Güvenlik Açıklarının Skorlanması Ve Kategorisinin Belirlenmesinde Yeni Bir Yöntem, 2021 - 2022