Cihan Varol
Associate Professor
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Degrees Earned

Ph.D. in Applied Computing, University of Arkansas at Little Rock, 2009

M.S. in Engineering, West Virginia University, 2005

B.S. in Computer Science, Firat University, 2002

Professional Licensure and Certifications
N/A

Peer-Review Publications and Artistic Performances/Exhibitions
   Articles
[1] SARIBOZ, E., **VAROL, C.** "Acquisition of Browser Artifacts from Android Devices", *International Journal of Cyber-Security and Digital Forensics (IJCSDF)*, Volume 7, Issue 2, pp. 175-182, June 2018
[2] KONERU, K, **VAROL, C.** "MetaSoundex Phonetic Matching for English and Spanish", Global Journal of Enterprise Information System, Volume 10, Issue 1, pp. 1-13, March 2018
[3] McDOWN, R., **VAROL, C.,** CARVAJAL, L., CHEN, L. "In-Depth Analysis of Computer Memory Acquisition Software for Forensic Purposes", *Journal of Forensic Sciences (JFS), Volume 61, Issue 51, pp. 110-116, January 2016* **(Impact Factor: 1.306)**
[4] MASTJIK, F., **VAROL, C.,** VAROL, A. "Comparison of Pattern Matching Techniques on Identification of Same Family Malware", *International Journal of Information Security Science (IJISS)*, Volume 4, Issue 3, pp. 104-111, September 2015
[5] MENDOZA, A., KUMAR, A., MIDCAP, D., CHO, H., **VAROL, C.,** "BrowStEx: A Tool to Aggregate Browser Storage Artifacts for Forensic Analysis, *Digital Investigation Journal ,* Volume 14, pp. 63-75, September 2015, ISSN 1742-2876 **(Impact Factor: 1.648)**
[6] **VAROL, C.,** HARI, S., "Detecting Near Duplicate Text Documents with a Hybrid Approach", *Journal of Information Science,* Volume 41, Issue 4, pp. 405-414, August 2015*,* DOI: 10.1177/0165551515577912 **(Impact Factor: 1.087)**
[7] VAROL, H., **VAROL, C.,** "Improving Female Student Retention in Computer Science during the First Programming Course*", International Journal of Information and Education Technology*, Volume 4, Issue 5, pp. 394-398, October 2014, DOI:10.7763/IJIET.2014.V4.437
[8] VILLEGAS, A., **VAROL, C.,** "CVOIP-FRU: Comprehensive VoIP Forensics Report Utility", *International Journal of Computer, Information Science and Engineering,* Volume 8, Issue 4, pp. 1-6, March 2014
[9] AMSDEN, N., **VAROL, C.,** "Malware Detection from a Virtual Machine: Correlating Unusual Keystrokes, Network Traffic, and Suspicious Registry Access", *International Journal of Computer and Information Technology (IJCIT)*, Volume 2, Issue 6, pp. 1029-1034, November 2013, ISSN: 2279 – 0764 **(Impact Factor: 0.687)**
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[12] **VAROL, C.**, BAYRAK, C., "Hybrid Matching Algorithm for Personal Names" *ACM Journal of Data and Information Quality (ACM JDIQ),* Volume 3, Issue 4, Article No: 8, September 2012, doi>10.1145/2348828.2348830

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[14] NUTHAKKI, M. K., METE, M., **VAROL, C.,** SUH, S. C., "UXSOM: UML Generated XML to Software Metrics" *ACM SIGSOFT Software Engineering Notes,* Volume 36, Issue 3, pp. 1-6, May 2011, ISSN: 0163-5948

[15] **VAROL, C.**, BAYRAK, C., "Estimation of Quality of Service in Spelling Correction using Kullback-Leibler divergence" *Elsevier: Expert Systems with Application,* Volume 38, Issue 5, pp. 6307-6312, May 2011 **(Impact Factor: 3.162)**

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Books
N/A

Chapters
[1] CHEN, L., **VAROL, C.,** LIU, Q., ZHOU, B., "Security in Wireless Metropolitan Area Networks: WiMAX and LTE", *Security, Privacy, Trust, and Resource Management in Mobile and Wireless Communications*, pp. 11-27, IGI-Global, ISBN: 978-1-4666-4691-9, 2013

[2] **VAROL, C.,** BAYRAK, C., WAGNER R., GOFF, D., "Application of Near Miss Strategy and Edit Distance to Handle Dirty Data", *Data Engineering: Mining, Information and Intelligence*, pp 91-101, Springer, ISBN: 978-1-4419-0175-0, 2010

Proceedings
[1] GARCIA, V., **VAROL, C.,** "Digital Forensics of 3D Printers", 6th *International Symposium on Digital Forensics and Security (ISDFS 2018)*, March 22-25, 2018, Antalya, Turkey

[2] KONERU, K., **VAROL, C.,** "Privacy Preserving Record Linkage using MetaSoundex Algorithm", *The 16th IEEE International Conference on Machine Learning and Applications (IEEE ICMLA'17)*, December 18-21, 2017, Cancun, Mexico

[3] VAROL, A., **VAROL, C.,** "Ethical Problems Arose in Public Universities in Turkey and USA: A Case Study Done at Firat and Sam Houston State Universities", *4th International Regional Development Conference*, September 21-23, 2017, Tunceli, Turkey

[4] KAMBAM S. R., **VAROL, C.,** "Author Disambiguation with Restricted Longest Common Subsequence Algorithm", *32nd International Conference on Computers and Their Applications (CATA 2017)*, March 20-22, 2017, Honolulu, HI, USA

[5] SILESSI, S., **VAROL, C.,** KARABATAK, M., "Identifying Gender from SMS Text Messages", *The 15th IEEE International Conference on Machine Learning and Applications (IEEE ICMLA'16)*, December 18-20, 2016, pp. 488-491, Anaheim, CA, USA. ISBN: 978-1-5090-6167-9/16

[6] KONERU, K., **VAROL, C.,** "Enhancement of Lempel-Ziv Algorithm to Estimate Randomness in a Dataset", *International Conference on Machine Learning and Data Analysis (ICMLDA'16)*, October 19-21, 2016, pp. 486-491, San Francisco, CA, USA

[7] KONERU, K., PULLA, V., **VAROL, C.,** "Performance Evaluation of Phonetic Matching Algorithms on English Words and Street Name: Comparison and Correlation", *5th International Conference on Data Management Technologies and Applications (DATA 2016),* July 24-26, 2016, pp. 57-64, Lisbon, Portugal

[8] CARVAJAL, L., CHEN, L., **VAROL, C.,** RAWAT, D., "Detecting Unprotected SIP-based Voice Over IP Traffic*", 4th International Symposium on Digital Forensics and Security (ISDFS 2016)*, April 25-27, 2016, pp. 44-48, Little Rock, Arkansas, USA

[9] PULLA, V., **VAROL, C.,** AL, M., "Open Source Data Quality Tools: Revisited", *13th International Conference on Information Technology: New Generations (ITNG 2016),* April 11-13, 2016, pp. 893-904, Las Vegas, Nevada, USA

[10] VAROL, C., HARI, S., "Improving Near Duplicate Data Detection via DSound Phonetic Matching Algorithm: A Solution to Address Typographical Problems", *The Seventh International Conference on Advances in Databases, Knowledge, and Data Application (DBKDA 2015)*, May 24-29, 2015, pp. 9-14, Rome, Italy. ISBN: 978-1-61208-408-4

[11] MASTJIK, F., **VAROL, C.,** VAROL, A., "Comparison of Pattern Matching Techniques on Identification of Same Family Malware", 3rd *International Symposium on Digital Forensics and Security (ISDFS 2015)*, May 11-12, 2015, pp. 224-228, Ankara, Turkey

[12] ONOCHIE, U.A., **VAROL, C.,** "An Exploration and Evaluation of Low-Cost SIEM Solutions for Risk Mitigation and PCI DSS Compliance: A Case Study", 3rd *International Symposium on Digital Forensics and Security (ISDFS 2015)*, May 11-12, 2015, pp. 238-243, Ankara, Turkey

[13] ZULLICK, D., **VAROL, C.,** "Business Continuity Opportunities in the Cloud: A Small to Medium Business Perspective", *4th International Conference on Business Intelligence and Technology (BUSTECH 2014),* May 25-29, 2014, pp. 8-13, Venice, Italy. ISBN: 978-1-61208-345-2

[14] MASTJIK, F., **VAROL, C.,** "Risk Management Methods in Small Scale Companies", *2nd International Symposium on Digital Forensics and Security (ISDFS 2014)*, May 12-13, 2014, pp. 105-109, The Woodlands, TX, USA

[15] VAROL, H., **VAROL, C.,** "Improving Female Student Retention in Computer Science during the First Programming Course*", 3rd International Conference on Educational and Information Technology (ICEIT 2014)*, January 10-12, 2014, Toronto, Canada

[16] VAROL, A., **VAROL, C.,** "Collaboration between College and Industry", *5th International Conference on Intellectual Capital Management (IICM 2013)*, September 11-12, 2013, Zanjan, Iran

[17] VAROL, C., VAROL, A., COOPER, P., "Digital Forensics Education in Turkey", *The First International Symposium on Digital Forensics and Security (ISDFS 2013)*, May 20-21, 2013, Elazig, Turkey

[18] CARVAJAL, L., **VAROL, C.,** CHEN, L., "Tools for Collecting Volatile Data: A Survey Study", *The International Conference on Technological Advances in Electrical, Electronics, and Computer Engineering (TAEECE2013)*, May 9-11, 2013, pp. 320-324, Konya, Turkey

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[20] MENDOZA, A., **VAROL, C.,** "Tracking Malware using Internet Activity Data", *International Conference on Computer Science and Applications (ICSSA 12),* October 24-26, 2012, pp. 102-105, San Francisco, California, USA

[21] VAROL, C., "Dynamic Job Scheduling in Multilayer Grid Networks", *International Conference on Systems Engineering and Engineering Management (ICSEEM 12),* October 24-26, 2012, pp. 1449-1452, San Francisco, California, USA

[22] VAROL, C., "Pattern Matching Techniques: A Survey Study Conducted on Social Security Numbers and Date of Births", *ICGST Conference on Computer Science and Engineering (CSE 11),* December 19-21, 2011, Istanbul, Turkey

[23] PAVLOCK, B., DAVENPORT, C., McDANIEL, A., CASEY, J., **VAROL, C., "**Address Verification and Standardization Based on Edit Distance and Soundex", *6th International Advanced Technologies Symposium (IATS'11)*, May 16-18, 2011, Elazig, Turkey

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[25] PUSHKAREV, V., NEUMANN, H., **VAROL, C.,** TALBURT, J., "An Overview of Open Source Data Quality Tools", *The 2010 International Conference on Information and Knowledge Engineering (IKE 2010)*, July 12-15, 2010, Las Vegas, Nevada, USA

[26] VAROL, C., BAYRAK, C., "Business Process Automation Based on Dependencies", *The Second International Conference on Information, Process, and Knowledge Management* (*eKNOW 2010),* February **10-15, 2010,** St. Maarten, Netherlands Antilles

[27] VAROL, C., VAROL, A., "Protection of the Private Information on Governmental Network". *International Conference eGovernment Sharing Experiences*, December 09-11, 2009, Antalya, Turkey

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[29] VAROL, C., BAYRAK, C., "Measuring Reliability Component for Quality of Service (QoS) in Business Process Automation", *The 14thInternational Conference on Distributed Multimedia Systems*, September 4-6 2008, Boston, Massachusetts, USA

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[31] VAROL, C., BAYRAK, C., "Applied Software Engineering Education", *ITHET 2005*, July 6-9, 2005, Santa Domingo, Dominican Republic

[32] VAROL,C., BAYRAK C., LUDWIG, R., "Application of Software Engineering Fundamentals: A Hands of Experience", *The 2005 International Conference on Software Engineering Research and Practice,* June 27-30, 2005, Las Vegas, Nevada, USA

[33] VAROL, C., DAS, R., DURSUN, O. O., "Software Metrics from XML and XML Metadata Interchange (XMI)", *BILTEK 2005*, June 2-4, 2005, Eskisehir, Turkey

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[35] VAROL, A., **VAROL, C.,** "Distance Education Based On a Combination System of Internet and Television", *2nd International Communication in the Millennium, A Dialogue Between Turkish and American Scholars, In Cooperation with University of Texas at Austin, USA, Anadolu University and Istanbul University*, March 17-19, 2004, pp.671-685, Istanbul, Turkey

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[39] VAROL, C., "Videoconference Applications", *Conference on the Education in Aspect of the Information Technologies and Exhibition, BTIE 2002,* May 20-22, 2002, pp. 274-278, Ankara, Turkey

[40] DAS, R., **VAROL, C.,** "Problems and Defined Solutions for Institutional Networks", *AB-2002 Academic Information Technology Conference,* February 6-8, 2002, Konya, Turkey

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[42] VAROL, C., "Lifelong Education", *Conference on the Education in Aspect of the Information Technologies and Exhibition, BTIE 2000*, May 15-17, 2000, pp. 127-130, Middle East Technical University (METU), Ankara, Turkey

[43] VAROL, C., "The student point of view to the computer teacher education", *Conference on the Education in Aspect of the Information Technologies and Exhibition, BTIE 1999*, May 13-15, 1999, pp. 105-109, Middle East Technical University (METU), Ankara, Turkey

Artistic Performances
N/A

Artistic Exhibitions
N/A

Research Monographs and Technical Reports
N/A

Funded External Grants
N/A

Peer-Review Presentations/Posters
[**1**] ONOCHIE, U.A., **VAROL, C.,** "An Exploration and Evaluation of Low-Cost SIEM Solutions for Risk Mitigation and PCI DSS Compliance: A Case Study", 3rd *International Symposium on Digital Forensics and Security (ISDFS 2015)*, May 11-12, 2015, Ankara, Turkey

Work or Professional Experiences

2015 – Present, Associate Professor of Computer Science, Sam Houston State University

2009 – 2015, Assistant Professor of Computer Science, Sam Houston State University

Honors and Awards
- Best Paper Award at ICMLDA 2016, Title: Enhancement of Lempel-Ziv Algorithm to Estimate Randomness in a Dataset

- Best Poster Award at ISDFS 2015, Title: An Exploration and Evaluation of Low-Cost SIEM Solutions for Risk Mitigation and PCI DSS Compliance: A Case Study

Other Competencies
- Journal Editor, Advances in Information Sciences and Service Sciences, An International Journal of Research and Innovation
- Journal Editor, International Journal of Information Processing and Management
- Journal Editor, International Journal of Intelligent Information Processing
- Manuscript Reviewer, Journal of Data and Information Quality
- Manuscript Reviewer, IEEE Transactions on Automation Science and Engineering
- Manuscript Reviewer, The International Journal of Business Innovation and Research
- Manuscript Reviewer, Measurement, Elsevier