**Cihan Varol, Ph.D.**

12821 Capricornus Dr.                          *Phone:* +(1) 501-256-4223
*Willis, TX, 77318*                                *Email:* cvarol@shsu.edu
                          *Webpage:* http://www.shsu.edu/~cxv007/index.html

## EDUCATION

**Ph.D in Applied Computing**                                    **May 2009**
University of Arkansas at Little Rock (UALR)**,** Little Rock, AR
Areas of Concentration: Information quality, Risk assessment, and Business Process Automation
Dissertation Topic: Hybrid Matching and Risk Assessment of Misspelled Names
Advisor: Dr. Coskun Bayrak

**M.S. in Engineering**                                          **May 2005**
Lane Department of Computer Science & Electrical Eng., West Virginia University (WVU), Morgantown, WV
Areas of Concentration: Software Architecture, Software Metrics, Error Propagation
Advisor: Dr. Bojan Cukic

**B.S. in Computer Science**                                     **June 2002**
Firat University, Elazig, TURKEY

## CURRENT POSITION AND AFFILIATION

**Assistant Professor**                              **August 2009 – Present**
Computer Science Department, College of Sciences, Sam Houston State University

- COSC 1436 (Programming Fundamentals I)      F'09, S'10, F'10, S'11, F'11, F'12
- COSC 4319 (Software Engineering)                                    F'10
- COSC and DFSC 4340 (Special Topics)                                F'12
- COSC 5325 (Operating System Security)                              S'12
- COSC and DFSC 5340 (Special Topics)                                S'13
- COSC 6319 (Software Engineering)                                   S'10
- DFSC 1317 (Intro to Digital Forensics / Information Assurance)   F'10, F'11
- DFSC 3320 (Digital Forensics Tools)                         S'11, S'12, S'13
- DFSC 6335 (Disaster Recovery)                       Summer'10, Summer'11
- DFSC 5335 (Risk Assessment & Financial System Security)            S'13

## PREVIOUS EMPLOYMENT EXPERIENCE

**Teaching Assistant**                             **August 2006 – May 2009**
University of Arkansas at Little Rock, Little Rock, Arkansas
*Courses:* Principles of Information Quality, Information Quality Tools, Object Oriented Programming, and Software Engineering

**Research Investigator**                       **October 2005 – August 2006**
Acxiom Laboratory for Applied Research (ALAR)**,** Little Rock, Arkansas
*Preparation of Customer Data for BCDI Processing*
-Identified approaches and developed prototypes to drive more automation and efficiency into the creation of BCDI workflows that control data processing in the Acxiom data warehouse and grid.

**Research Assistant**                          **August 2004 – January 2006**
Applied Computing Department, UALR, Little Rock, Arkansas
*Designing a Batch CDI Flow Generator*

-Managed eight graduate level students to implement an automatic flow generator to Acxiom Corporation's Customer Data Integration System and applied information retrieval techniques to provide customer expectations from misspelled information.

**Research Assistant**                                                          **June 2004 – August 2004**
Applied Computing Department, UALR, Little Rock, Arkansas
*3D Modeling and Simulation of Urodynamics*
-Developed 3D modeling and visualization of Urinary System and showing the Stress Incontinence during coughing

**Research Assistant**                                                          **August 2002 – August 2003**
Lane Department of Computer Science and Electrical Engineering, WVU, Morgantown, WV
*Software Architecture Metrics*
-Led software developer on a NASA sponsored software architectural metrics project. The work involved focusing on error and change propagation to define and validate a set of architectural metrics for assessing quality of software architectures.

## HONORS AND AWARDS
- Awarded a Certificate of Honor from the Balakgazi High School due to graduated as the top of the Students with Honor Grade
- Graduated as the best student (top GPA) from Computer Science Department, Elazig, Turkey

## PROFESSIONAL SERVICES
- 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
- Program Committee Member, 4th International Conference on Data Mining and Intelligent Information Technology Applications (ICMIA 2012), October 23-25, 2012, Taipei, Taiwan
- Program Committee Member, 17h North-East Asia Symposium on Nano, Information Technology and Reliability (NASNIT 2012), October 23-25, 2012, Taipei, Taiwan
- Program Committee Member, 6th International Conference on New Trends in Information Science, Service Science and Data Mining (ISSDM 2012), October 23-25, 2012, Taipei, Taiwan
- Program Committee Member, 8th International Conference on Advance Information Management and Service, (ICIMP 2012), September 18-20, 2012, Kyoto, Japan
- Program Committee Member, 6th International Advanced Technologies Symposium, (IATS 2011), May 16-18, 2011, Elazig, Turkey

## PROFESSIONAL MEMBERSHIPS
- IEEE Member
- ICGST Academic Member

## SERVICES FOR THE UNIVERSITY
- Distance Education Committee Member                                          **October 2011 – Present**

## SERVICES FOR THE DEPARTMENT
- CS Faculty Search Committee Member                                          **September 2012 - Present**

- CS Graduate Curriculum Committee Member **February 2012 – Present**
- CS Undergraduate Curriculum Committee Member **September 2009 – Present**
- CS Scholarship Committee Member **September 2009 – Present**

## ADVISING ACTIVITIES (Sam Houston State University)
### M.S. Project Chair
- Sridvya Penmetsa (Computer Science), "Differentiating The Accuracy Problems in a Dataset:", To graduate Spring 2013
- Sairam Hari (Computer Science), "A Hybrid Approach for Detection of Near Duplicates in Web Pages", Graduated Fall 2012
- Garrett Calpouzos (Digital Forensics), "Steganography with open source audio codec for use in VoIP", Graduated Summer 2012
- Alejandro Villegas (Information Assurance), "CVOIP-FRU: Comprehensive VoIP Forensics Report Utility", Graduated Spring 2012
- Kishore Shimikeri (Computer Science), "Parts Based Image Recognition Model- Finding Waldo". Graduated Spring 2011
- Sandeep Naidu (Computer Science), "Generating a Panoramic View with Using SIFT and RanSac". Graduated Fall 2010
- Revathi Kanna (Computer Science), "Content based Information Retrieval using CMD". Graduated Fall 2010
- Henry Neumann (Computer Science), "Real-Time Quality of Service Monitoring for Information Quality Products". Graduated Spring 2010

## RESEARCH SUPPORT
### Awarded:
PI: Cihan Varol, **June 2012 - September 2012**
"Three Dimensional Modeling and Simulation of Stress Incontinence"
Sam Houston State University Competitive Intramural Faculty Research Grant (FRG)
Amount $5,000

PI: Cihan Varol, Co-PI (Gary Smith) **June 2010 – May 2011**
"Detecting Illusive Records within Law Enforcement Database"
Sam Houston State University Competitive Intramural Enhancement Research Grant (ERG)
Amount $13,363

### In Preparation:
PI: Cihan Varol
"REU Site: Undergraduate Research Experience in Information Assurance"
NSF: Research Experiences for Undergraduates

## PUBLICATIONS
### Book Chapter:
[1] **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

### Journal Papers:
[1] **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

**[2] VAROL, C.,** NEUMANN, H., "Real-Time Data Quality Monitoring System for Data Cleansing", *International Journal of Business Intelligence Research,* Volume 3, Issue 1, January 2012, pp. 83-93, ISSN: 1947-3591

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

**[4] 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, May 2011, Pages 6307-6312 **(Impact Factor: 3.162)**

**[5] VAROL, C.,** BAYRAK, C., "Risk Assessment of Error-Prone Personal Information in Data Quality Tools" *Journal of Computers, Academy Publisher*, Volume 6, No 2, February 2011, ISSN 1796-203X

**[6] VAROL, C.**, STAFFORD B., KOVVURI, K., CHITTI, R. "Author Disambiguation using an Hybrid Approach of Queries and String Matching Techniques" *IJIIP: International Journal of Intelligent Information Processing*, Vol. 1, No. 1, pp. 3-11, 2010

**[7]** COLLINS, M., REYNOLDS, C., LE, C., **VAROL, C.,** BAYRAK, C., "Automated data verification in a format-free environment" *ACM SIGSOFT Software Engineering Notes*, Vol. 31, Issue 2, March 2006, pp. 1-4, ISSN:0163-5948

**Conference Publications:**

**[1]** 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

**[2] 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

**[3] 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

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

**[5] VAROL, C.,** TALBURT, J., "Pattern and Phonetic Based Street Name Misspelling Correction", *8th International Conference on Information Technology: New Generations (ITNG 2011),* pp. 553-558. April 11-13, 2011, Las Vegas, Nevada, USA

**[6]** 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

**[7] 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

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

**[9] VAROL, C.,** BAYRAK, C., "Personal Name-based Pattern and Phonetic Matching Techniques: A Survey" *ALAR Conference on Applied Research in Information Technology*, February 13, 2009, Conway, Arkansas, USA

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

**[11] VAROL, C.**, ROBINETTE, C., KULAGA, J., BAYRAK, C., WAGNER R., GOFF, D., "Application of Near Miss Strategy and Edit Distance to Handle Dirty Data", *ALAR Conference on Applied Research in Information Technology*, March 3, 2006, Conway, Arkansas, USA

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

**[13] 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

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

**[15] VAROL, C.,** BAYRAK C., "Student Centered Software Engineering Education", *Global Educational Technology Symposium,* May 4-5, 2005, Little Rock, Arkansas, USA

**[16]** 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*, pp.671-685, March 17-19, 2004, Istanbul, Turkey,

**[17]** AMMAR, H., SHERESHEVSKY, M., ABDELMOEZ, W., GUNNALAN, R., **VAROL, C.**, "WVU UI: Software Architecture Metrics", *The OSMA Software Assurance Symposium*, July 30, 2003, Lakeview, WV, USA

**[18]** DAS, R., **VAROL, C.**, "The Importance of the Institutional Networks of distance Education and recommendations for their problems", *International Open and Distance Education Symposium*, May 23-25, 2002, Eskisehir, Turkey

**[19]** VAROL, A., **VAROL, C.**; GUR, K.; DOGAN, S.; BULUT, M.; DEMIR, F., "Student Oriented Education Application of the Faculty of Technical Education of Firat University", *Conference on the Education in Aspect of the Information Technologies and Exhibition,  BTIE 2002*, pp. 242-246, May 20-22, 2002, Ankara, Turkey

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

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

**[22] VAROL, C.**: VAROL, N., "The Internet Cafes and the approach of the younger generation to the use of internet", *Conference on the Education in Aspect of the Information Technologies and Exhibition, BTIE 2001,* pp. 14-19,  May 03-05, 2001, Middle East Technical University (METU), Ankara, Turkey,

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

**[24] 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*, pp. 105-109, May 13-15, 1999, Middle East Technical University (METU), Ankara, Turkey

**Seminars and Presentations at Conferences:**

**[1] VAROL, C., "**VoIP and Digital Forensics", Digital Forensics and Biometric Systems", May 23, 2012, Kahramanmaras Court House, Kahramanmaras, Turkey

**[2] VAROL, C., "**VoIP and Digital Forensics", Digital Forensics and Biometric Systems", May 25, 2012, Mustafa Kemal University, Hatay, Turkey

**[3] VAROL, C.,** "Providing QoS in Business Process Automation", *Graduate Research Forum*, April 21, 2006, University of Arkansas at Little Rock

**[4]** BAYRAK, C., **VAROL, C.,** "A Framework to Automate the Generation of BCDI Process Flows" *Acxiom Laboratory for Applied Research Conference* (ALAR'06), March 3, 2006, Conway, AR

**[5] VAROL, C.,** "Batch Customer Data Integration System", *Graduate Research Forum*, April 22, 2005, University of Arkansas at Little Rock

**[6]** XIAO, Z., **VAROL, C.,** WINGNING, Li, THOMPSON C., BAYRAK, C., "Workflow Automation," *Acxiom Laboratory for Applied Research Conference* (ALAR'05), Feb. 18, 2005, University of Central Arkansas, Conway, Arkansas

**[7] VAROL, C.**: "e-life" April 24, 2002, Firat University, Turkey,

**[8] VAROL, C.**: "Problems of the Internet Cafes", *Informatics World*, April 26, 2001, Firat University, Turkey.

**Attended Workshops and Seminars:**
**[1]** CHSS Teaching Conference, SHSU, Huntsville, TX, August 23, 2012
**[2]** NSF Workshop, Texas State University, San Marcos, TX, February 18, 2011
**[3**] Writing in the Disciplines Seminar, SHSU, Huntsville, TX, May 24-28, 2010
**[4]** eCollege Training Workshop, SHSU, Huntsville, TX, December 18, 2009
**[5]** Grant Workshop, SHSU, Huntsville, TX, November 18, 2009
**[6]** CHSS Teaching Conference, SHSU, Huntsville, TX, August 21, 2009