

Kavous Roumina, Ph.D.
Department of Information Systems
W P Carey School of Business, Arizona State University, Tempe, AZ 85287
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Education:

Ph.D., Computer Science, August 2000
Case Western Reserve University, Cleveland, Ohio

Dissertation: Case-Based Planning for Quality Control Inspection: Representation, Recognition, and Retrieval.

M.S., Computer & Information Science, June 1988
Cleveland State University, Cleveland, Ohio

B.S., Computer & Information Science (Minor: Industrial Engineering), March 1985
Cleveland State University, Cleveland, Ohio

Current Position:

Arizona State University, Tempe, AZ; August 2016 - Present

W. P. Carey School of Business, Department of Information Systems; Clinical Assistant Professor

CIS 235 Introduction to Information Systems; F '16; S '17

CIS 375 Business Data Mining; Smr. '17 (online); S '18; Smr. '18 (online)

CIS 425 Enterprise Web Technologies; S '17, '18; F '17, '18; Smr '17, '18

Previous Positions:

Lakeland Community College, Kirtland, Ohio; January 2003 – May 2016

Information Technology & Computer Science (ITCS) Department; Part-Time Faculty

ITCS 1010 Programming Logic (Lecture & Lab); Fall 2013

ITCS 2010 Systems Analysis and Design (Lecture & Lab); Spring 2006-10, Fall 2010 (With Online Assistant), Spring 2011, 2013-15 (With Online Assistant)

ITCS 2105 World Wide Web Programming II; Fall 2008 (Independent Study)

ITCS 2120 JavaScript Programming II; Spring 2007 (On-line; Prepared content), Fall 2008

ITCS 2140 CGI Programming II; Fall 2006 (On-line; Prepared content), Fall 2008 (Independent Study); Fall 2009

ITCS 2170 Introduction to ASP.NET; Spring 2012 (On-line; Prepared content)

ITCS 2810 Visual Basic.NET Programming II (Lecture & Lab); Spring 2003, 2004, Fall 2006, Spring 2007-10; Fall 2011 (On-line; Prepared content)

ITCS 2812 Visual Basic for Applications (Lecture & Lab); Spring 2005-08 (Independent Study)

ITCS 2820 Java Programming II (Lecture & Lab); Fall 2003-05

ITDB 1406 MS SQL Concepts (Lecture & Lab); Spring 2013, 2016 (Online)

ITDB 1430 MS Access Relational Database (2007) (Lecture & Lab); Spring 2008

ITIS 1000 Introduction to Personal Computers; Spring 2012 (Online; Prepared content)

ITIS 1005 Computers and Information Processing (Lecture & Lab); Fall 2007-09, 2011-12); Spring 2016 (Online)

ITIS 1100 Internet: Services, Tools, & Web Page Creation (Lecture & Lab); Spring 2011 (Online)

ITIS 1108 Using an HTML Editor – Dreamweaver; Spring 2009 (On-line; Prepared content)

ITIS 1130 Introduction to Web Design; Fall 2010 (On-line; Prepared content).

Mathematics Department; Part-Time Faculty

MATH 0745 Skills for Algebra; Spring 2015-2016, Fall 2015

MATH 0850 Beginning Algebra; Spring 2016

Cleveland Clinic, Cleveland, Ohio; July 1994 – July 2016

Cleveland Clinic is a 1400 bed, not-for-profit, multi-specialty academic medical center that integrates clinical and hospital care with research and education.

Center for Pathology Informatics; Manager, Applications (Sys. Support/Development) (Jun. 2009-Jul. 2016)

Managed four Systems Analysts and one Lead Systems Analyst; Managed and tracked departmental projects; Managed and supported several departmental applications; Developed and supported business intelligence dashboards; Prepared and evaluated RFPs for Laboratory Information Systems (LIS).

Center for Pathology Informatics; Lead Systems Analyst (Aug. 2006-Jun. 2009)

Assisted manager in tracking projects; Developed custom applications (“Test Information Management System”; Hand-held device scanning bar-coded as well as textual data and uploading to a desktop database); Developed and supported intranet Web sites (ASP.NET); Generated custom reports based on extracted data from LIS; Co-project managed a mid-size system upgrade.

Center for Pathology Informatics; Systems Analyst (Jul. 1994-Aug 2006)

Developed custom applications.

Center for Pathology Informatics; Database Administrator (DBA) (Aug. 2006-July 2016)

Designed, supported, and maintained databases on MS SQL servers (and MS Access).

Case Western Reserve University, Cleveland, Ohio; Sep. 1990 - Sep. 1992

Department of Electrical Engineering; Research Assistant; Part-time

Researched and programmed for an Air Force supported rapid prototyping system (an object-oriented, feature-based manufacturing/inspection system).

Case Western Reserve University, Cleveland, Ohio; Jan. 1989 - Sep. 1990

Weatherhead School of Management; Computer Lab Consultant; Part-time

Helped users with software and hardware problems; Taught software training classes.

Presentations (Refereed):

- R. Hill, **K. Roumina**, S. Stahl, S. Krall, W. Henricks “Integration of Paper-based Send Out Laboratory Reports in an Electronic Medical Record,” *Advancing Practice, Instruction, and Innovation Through Informatics (APIII): Anatomic Pathology Informatics and Imaging Support For Translational Medicine*, University of Pittsburgh Medical Center, Pittsburgh, PA., September 9-12, 2007.)
- R. Hill, **K. Roumina**, S. Staugatis, W. Henricks “Automated Management Of Procured Tissue For The Research Community,” *Advancing Practice, Instruction, and Innovation Through Informatics (APIII): Frontiers in Oncology and Pathology Informatics*, Lake Tahoe, CA., August 24-26, 2005.
- **K. Roumina**, W. Henricks “PDA-based Specimen Tracking and Management for the Outreach Laboratory,” *Advancing Practice, Instruction, and Innovation Through Informatics (APIII):*

Frontiers in Oncology and Pathology Informatics, University of Pittsburgh Medical Center, Pittsburgh, PA., October 6-8, 2004.

- **K. Roumina**, T. Shirk, W. Henricks “Web-based Management Improves User Access Security Practices for Laboratory Information Systems,” *Advancing Practice, Instruction, and Innovation Through Informatics (APIII): Frontiers in Oncology and Pathology Informatics*, University of Pittsburgh Medical Center, Pittsburgh, PA., October 8-10, 2003.
- R. Delvalle, **K. Roumina**, S. Ruegsegger, and F. Merat, “Heuristic planning in feature-based inspection for Coordinate Measuring Machines,” *Proceedings of SPIE, Applications of Artificial Intelligence 1993: Knowledge-Based Systems in Aerospace and Industry*, Orlando, Florida, April 1993.
- F. Merat, G. Radack, **K. Roumina**, and S. Ruegsegger, “Automated inspection planning within the Rapid Design System,” *Proceedings of 1991 IEEE International Systems Conf.*, Dayton, Ohio, Aug. 1991.

Invited Presentations (Non-Refereed):

- **K. Roumina**, “Tackling the challenges of specimen tracking within and without the Cleveland Clinic,” Lab Quality Confab, San Antonio, TX, Nov. 6, 2012.
- **K. Roumina**, “Logistics – A Case Study (Gajema),” Cerner/CoPath, Boston, MA, Feb. 10, 2011.
- **K. Roumina**, “Laboratory Information Systems,” Cuyahoga Community College, Cleveland, OH, Dec. 13, 2010.
- **K. Roumina**, “Understanding Patient Turnaround (Wait) Times,” 1st Annual Education Conference (Patient-Focused Laboratory), Cleveland Clinic, Cleveland, OH, Apr. 17, 2010.

Publications (Refereed):

- W. Henricks, T. Shirk, **K. Roumina**, “Implementation of User-Tailored Data Analytics in a Complex Laboratory Setting,” *Journal of Pathology Informatics*, 7:33, P. S11, July 2016.
- **K. Roumina**, E. Farber, W. Henricks “Real-Time Detection and Display of Critical Values in the Laboratory Improves Caregiver Notifications,” *Journal of Pathology Informatics*, 3:37j, P. 1, 2012.
- **K. Roumina**, E. Farber, W. Henricks “Extraction and Analysis of Data Elements from Text-based Prostate Cancer Pathology Reports,” *Journal of Pathology Informatics*, 2:43e, P. S20, 2011.
- R. Hill, **K. Roumina**, W. Henricks “An Automated System for Managing the Storage and Retrieval of Organisms Isolated in the Microbiology Laboratory,” *Journal of Pathology Informatics*, 2:43b, P. S6, 2011.
- **K. Roumina**, R. Hill, W. Henricks “Capture, Analysis, and Management of Patient Wait Times for Outpatient Phlebotomy,” *Journal of Pathology Informatics*, 1:18, P. 7, 2010.

- **K. Roumina**, W. Henricks “Development of a Web-Based System for Managing Requests for LIS Data Searches in a Distributed Laboratory Environment,” *Journal of Pathology Informatics*, 1:18, P. 5-6, 2010.
- **K. Roumina**, W. Henricks, M. Pirzada “Improved Specimen Tracking and Management for the Hospital Outreach Laboratory,” *Archives of Pathology and Laboratory Medicine*, 127:807, 2003.
- W. Henricks, **K. Roumina**, W. Stinson, D. Duca, “Electronic document imaging improves paper management in pathology,” *Archives of Pathology and Laboratory Medicine*, 126:792, 2002.
- W. Henricks, **K. Roumina**, B. Skilton, D. Ozan, “The utility and cost effectiveness of voice recognition technology (VRT) in pathology,” *Modern Pathology*, V. 15, No. 5, P. 565-571, 2002.
- **K. Roumina** and F. Merat, “Classification of quality control inspection process plans,” Submitted to *Artificial Intelligence in Engineering Design and Analysis in Manufacturing (AI-EDAM)*.
- **K. Roumina**, “Case-based planning for quality control inspection: representation, recognition, and retrieval,” *PhD Dissertation*, Case Western Reserve University, Cleveland, Ohio, August 2000.
- S. Lin, **K. Roumina**, A. Fadlalla, & W. Henricks, “Integrating data from legacy systems using object linking and embedding technology,” *Journal of American Medical Informatics Association*, V. 7, No. 4, July/August 2000.
- **K. Roumina** and F. Merat, “An object-oriented architecture for Computer Aided Inspection,” *The 10th ISPE/IFAC International Conference on CAD/CAM, Robotics and Factories of the Future*, pp. 27-32. (Presented at *10th International Conf. on CAD/CAM, Robotics and Factories of the Future*, Ottawa, Canada, August 21-24, 1994.)

Publications (Non-Refereed):

- **K. Roumina** and F. Merat, “The ART of inspection plan clustering,” *Proceedings of the Third International ICSC Congress on Computation Intelligence: Methods and Applications (CIMA’99)*, Rochester, NY, June 22-25, 1999.
- **K. Roumina** and F. Merat, “Fuzzy clustering of inspection process plans,” *Sixth IASTED International Conference on Robotics and Manufacturing*, Banff, Canada, July 1998.

Lectures:

- **K. Roumina** “Laboratory Information Systems,” School of Medical Technology, Cleveland Clinic, Cleveland, OH, Jul. 2008 – 2011; Mar. 2016.

Services:

ASU Department of Information Systems, Undergraduate Program - UG sub-committee: CIS Program Review, 2016-2018.

Awards:

Honorable Mention in Innovations: “PDA-based Specimen Tracking and Management for the Outreach Laboratory,” *Advancing Practice, Instruction, and Innovation Through Informatics (APIII): Frontiers in Oncology and Pathology Informatics*, University of Pittsburgh Medical Center, Pittsburgh, PA., October 2004.

Professional Development and Advanced Training:

Pedagogy Training

Certificate in Effective College Instruction

Course in Effective Teaching Practices

Association of College and University Educators (ACUE) and American Council on Education

July 2018

Technology Enriched Instruction: A Microsoft in Education Workshop for Faculty

Intermediate Level 1 (4 Modules)

Education.Microsoft.com (Certificate available)

December 2017

Problem-Based Learning

Intermediate Level 2 (2 Modules)

Education.Microsoft.com (Certificate available)

December 2017

Technological Proficiencies:

Programming Languages: Visual C#.NET, Visual Basic.NET, Java, ASP.NET, JSP, JavaScript, Node.js

Databases: MS SQL, MS Access, MySQL

Systems: MS Windows, UNIX, TCP/IP, Domain Name Service (DNS), MS SQL Server

Web Authoring: HTML, CSS, JavaScript, jQuery, MS Internet Information Server (IIS)

Productivity Applications: MS Office

Course Management System: Blackboard

Student Management System: Banner

Organizational Affiliations:

Association for Computing Machinery (ACM)

Association for Pathology Informatics (API)

Other:

Co-inventor of U.S. Patent No. 5,465,221 (*Automated Process Planning for QC Insp.*, Nov. '95)

Outside academic advisor for an undergraduate thesis:

The Impact of Interface Engines on Laboratory Information Systems

Donald Bianchini

Capital University

Cleveland, Ohio

July 2003