PETER ALAN COOPER, Ph.D.

Professor and Department Chair, Computer Science
Sam Houston State University Huntsville TX 77341
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ACADEMIC PREPARATION:

University of Missouri-Columbia, Doctor of Philosophy
Major: Higher Education
Minors: Computer Science, Statistics, Curriculum & Instruction

University of Missouri-Columbia, Master of Arts
Major: Adult Education

University of London Institute of Education, Graduate Diploma in Education
Majors: Computer Science, Statistics

The Open University, U.K. Bachelor of Arts
Majors: Sociology, Education

University of London Goldsmiths' College, Teaching Certificate
Major: Mathematics

EXPERIENCE

Professor and Department Chair of Computer Science, Sam Houston State University, Huntsville, TX, 2006 – present

Director, Center of Excellence in Digital Forensics, Sam Houston State University, Huntsville TX, 2004- 2011

Associate Professor and Department Chair of Computer Science, Sam Houston State University, Huntsville, TX, 2003 – 2006

Computer Science Program Coordinator, Department of Mathematics, Computer Science and Statistics, Sam Houston State University, Huntsville TX, Fall 2002

Associate Professor Computer Science, Sam Houston State University, Huntsville TX, 2000 - 2002
Assistant Professor Computer Science, Sam Houston State University, Huntsville TX, 1997 – 2000

Assistant Professor Computer Science/Business, Southwest Baptist University, Bolivar MO. 1988-1996

Director of Academic Computing, Southwest Baptist University, Bolivar MO. 1988-1993

Department Chair, Computer Science/ Computer Science/Mathematics Teacher, Inner London Education Authority, London England. 1975 –1988

CURRICULUM AND EDUCATIONAL CONSULTING

Texas International Education Consortium. Educational Consultant for Prince Mohammed Bin Fahad University, Dammam Saudi Arabia 2012.

Texas International Education Consortium. Educational Consultant for Al Selah University, Sana'a Yemen. November 2009 – April 2010.

Texas International Education Consortium. Educational Consultant for Universidad Autonoma de Nuevo Leon, Monterrey, Mexico. April – July 2008.

Kihae Enterprises. Network Consulting. 2007 – present.

Texas International Education Consortium. Lead CS/CE/IT Educational Consultant for Prince Mohammed Bin Fahad University, Dammam Saudi Arabia. April 2004-March 2005.

Consultant for Technology Integration in Secondary Science. March 11th 1999, December 11th 1999 (Dr. Joel Bass, P.I.)

Texas International Education Consortium. Syllabus Development For International Computer Science Programs (1999)

Huntsville Independent School District, Huntsville, TX. Consultant for Technology Integration.

Columbia MO Public School District. Instructional Materials Development.1992

REFEREED PUBLICATIONS

P. Cooper, L. Chen, and C. Sun, "Secure Last Acknowledged Packet Routing Algorithm (SLAPRA) for MANETs," International Journal of Future Computer and Communication vol. 2, no. 4 pp. 299-303, 2013.

Liu, Q, Cooper, P.A., Cho, H., Chen Z., Qiao, M., Su, Y., Wei, M., and Sung, A.M. . Detection of JPEG double compression and identification of smartphone image source and post-capture manipulation. Applied Intelligence. pp 1-22. 2013

Chen L, Cooper, P.A. & Liu Q. (2012). Security in Bluetooth Networks and Communications Wireless Network Security: Theories and Applications. Springer (U.S.) and Higher Education Press (China). March 2013.

Liu, Q,. Cooper, P.A. Li, X., & Hu, X. (2012). Shift Compression-Based Feature Mining for Detecting Content-Aware Scaled Forgery In JPEG Images. MDMKDD '12, Beijing, China.

Cooper, P.A. Finlay, GT., and Kaskenpalo, P. (2010).Towards Standards in Digital Forensics Education.   Proceedings of the 2010 ItiCSE working group reports.

Cooper, P.A. (2008) The Philosophy of Discipline: Two analogies in the Pursuit of the Nature of Academics. Perspectives in Higher Education Reform,*2008*, 15-16.

Shannon, L. Y. & Cooper, P.A. (2008). A Study of ICT Issues in Higher Education in Taiwan R.O.C. and Texas U.S.A. Proceedings of the 2008 Annual International Association for Computer Information Systems. Issues in Information Systems. 9(1), 21-29.

Bennett and Cooper (2008). EdPod: Adding Classroom Richness to the On-Line Experience. Information Systems Education Journal, 6 (53). http://isedj.org/6/53/. ISSN: 1545-679X. (A preliminary version appears in The Proceedings of ISECON 2006: §2744. ISSN: 1542-7382.)

Shannon, L. Y., Polnick, B.E., & Cooper P.A. (2006).Millennial Generation Leads The Changes In Higher Education. Proceedings of the 2006 Asia-Pacific Research Association International Conference.

Siegel, M.H, So, W. & Cooper, P.A. (2005). Subtractive Black Holes and Black Loops. Texas College Mathematics Journal. 2(1). 1-9.

Cooper, P.A. (2005) Speciation in the Computing Sciences: Digital Forensics as an Emerging Academic Discipline. Proceedings of Information Processing Society, International, 2005 ISBN 86-7466-117-3.

Bennett and Cooper (2003). The Computer Literacy Course: Putting It All Together. Information Systems Education Journal, 2 (6). http://isedj.org/2/6/. ISSN: 1545-679X. (Also appears in The Proceedings of ISECON 2003: §3112. ISSN: 1542-7382.)

Gonzalez, Baral, & Cooper. (2002). Formal specification of multimedia displays using action based temporal logic. In Zhou, X. & Pu, P (Ed.) *Visual and Multimedia Information Management.*141-155.

Cooper P.A. (2002). Road and Bridge Maintenance: Embedding GeoMedia in Visual Basic Applications. <u>Proceedings of 2002 GeoSpatial World Conference</u>, Atlanta Georgia, June 11th 2002

Cooper, P.A. (2001). Design of Content Independent Instructional Systems. <u>Proceedings of the 5th International Conference on Technology in Mathematics Teaching</u>, Klagenfurt, Austria (August 2001)

Cooper, P.A. & Hirtle J.S.(2001)   Computer-Mediated Communication, The Infosphere and the Virtual Learning Community <u>Proceedings of the 2001 SITE International Conference</u>.

Cooper, P.A. & Hirtle J.S.(2001)   Growing the Learning Landscape: Experience in Environment and Process <u>Proceedings of the 2001 SITE International Conference</u>.

Cooper P.A. & Hartness, K.(2000) Structured Communication in Java. <u>Journal of Computing in Small Colleges</u> 15(3) 182-183.

Cooper, P.A. (2000). Building Client Server Systems: Exercises in Network Communication. <u>Journal of Computing in Small Colleges</u> 15(3) 77-84.

Klespis, M.L., & Cooper, P.A. (1999) An Integrated Introductory Mathematics and Computer Science Course. Proceedings of the 4th International Conference on Technology in Mathematics Teaching, Plymouth, U.K.

Cooper P.A. (1999) Paradigm Shifts in Designed Instruction. Reprinted in course materials for EDCI 520 Assessment in Bilingual/ESL Settings at George Mason University. Dr. Valdez-Pierce Instructor. Spring 199 and Fall 1999.

Cooper, P.A. (1998). Revising the Computer Science Curriculum: Rationale, Processes, Results and Implications. In Dowdy, D, Jones, B. & Pannell, K., *TR5: An introduction to research writing*. Simon & Schuster, Needham Heights, MA. 505 – 512.

Cooper, P.A.(1998). Managing Small Computer Systems. . Journal of Computing in Small Colleges 13(4). 55-57

Carroll, J. & Cooper, P.A. (1998) The Politics of Curriculum Reform. Journal of Computing in Small Colleges 13(4). 119-124

Cooper P.A. (1996). Revising the Computer Science Curriculum: Rationale, Processes, Results and Implications. <u>Journal of Computing in Small Colleges</u>

Cooper P.A. (1993) Paradigm Shifts in Designed Instruction: From Behaviorism to Cognitivism to Constructivism. <u>Educational Technology</u> 23(5) pp12-18

Cooper, P.A. (1991) Computing Information Services: Directors' Perception of Their Role and Function. Educom Review 26(1), 40-45.

NON-REFEREED PUBLICATIONS

Cooper, P.A. Kaskenpalo, P. & Finlay G. Towards Standards in Digital Forensics Education" Report of the ItICSE Conference working group. Ankara Turkey. June 26-30, 2010.

Cooper, P.A. & Shannon L.Y. (2006) *In Defense of Computer Literacy.* http://www.cs.shsu.edu/indef

Cooper, P.A. et al (2004) *Prince Mohammad Bin Fahd Undergraduate Information Technology and Computer Science Programs.* Technical report for the Texas International Education Consortium, Austin, Texas. (215 pages)

Cooper, P.A., Gonzalez, G.H. & McGuire, T. "Development of a Hydrology Data Repository and Models Tutorial," Final Report, submitted to the U.S. Army Corps of Engineers, Engineering Research and Development Center, Champaign, Illinois. December 12th 2002.

Cooper, P.A. & Hirtle, J.S (1999). A Constructivist Approach to Technology Literacy for Preservice Teachers. ' Society for Information Technology & Teacher Education 9th International Conference. San Antonio, TX, March 1999.

Bennett, Judith F. & Cooper, Peter A. (1997) CS 133/138 Workbook. Sam Houston State University Press. Huntsville TX.

GRANTS & RESEARCH ACTIVITIES

2014, Enhancement Research Grant (ERG), Sam Houston State University Attacks and Digital Forensics in Personal Computer Games. ($15,000). Chen L, PI, Cooper, P.A. Co-PI.

Development And Quantitative Evaluation Of Steganalysis And Digital Forgery Detection Systems. National Institute of Justice ($330K 10/2010 – 09/2012) Liu Q, PI, Cooper, P.A and Sung A.H co-PI.

2010, Enhancement Research Grant (ERG), Sam Houston State University "Secure Routing for Real-Time Media Streaming in MANETs", $15,000. Lei Chen PI. Cooper Co-PI.

Law Enforcement Training in Digital Forensics (2006). Bureau of Justice Administration. PI Cooper, Co-PI Murff. ($388,000). Awarded October 2006.

Law Enforcement Training in Digital Forensics (2005). Bureau of Justice Administration. PI Cooper, Co-PI Murff. ($197,329). Awarded January 2006.

Sam Houston State University Center of Excellence in Digital Forensics. (2004). US Department of Justice. PI. Cooper. ($989,477) Awarded November 2004

Imaging Application. Software Development for Walker County. Project initiated September 2002. ($3,500)

Development of Road and Equipment Maintenance and Repair system for Walker County Commissioner's Office (2000-2001) P.I. Cooper. Co-PI Richard Rush ($7000)

A Development of a Hydrology Data Repository and Models Tutorial (2001-2002). Submitted to CERL. P.I. Cooper. Co-investigator: Graciela Gonzalez, Tim McGuire. ($250,000). Awarded.

A Development of a Hydrology Data Repository and Models Tutorial (2000-2001). Submitted to CERL. P.I. Cooper. Co-investigator: Gary Smith. ($318,940). Awarded.

Development of database system for management of Septic System licensing, Walker County (2000-2001). Co-PI Richard Rush. $8000 awarded.

Acquisition of Instrumentation to Support VR Modeling of Magnetic Resonance Images (2001) Submitted to NSF. P.I. Cooper . Co-PI Cecil Hallum. Co-Investigators Smith, McGuire, Wang. (not funded. University sponsored project, $20,000, ¼ release time).

Evaluating the Impact of Computer-Mediated Communication in the Learning/Teaching Process (1999). Submitted to Sam Houston State University Research and Sponsored programs. Co-investigator Jeannine Hirtle ($4389). Awarded

Image Analysis In Support Of Threatened And Endangered Species (ETS) Habitat Monitoring.(1998). Submitted to SERDP. Co-investigators: Jamie Hebert (PI), Wasin So. ($419,634). Awarded

Fort Hood Watershed Study and WIARS, WMS and IDLAMS Data and Technology (1998) P.I. Gordon Plishker, Co-investigators: Jaimie Hebert, G. Smith, Cecil Hallum. ($223,543). Awarded

A Computer Lab for an Integrated Introductory Mathematics and Computer Science Course. (1998). Submitted to the National Science Foundation. Co-investigators: Dave Ruch (PI), Mark Klespis. ($47,977). Awarded

Cooper, P. A. & Goad B. (1997). Designing an Affective Domain Assessment for evaluating Attitudes toward Mathematics.

Cooper, P.A., Hirtle, J.S. & McGrew-Zoubi R. (1998). Designing Internet Instructional Applications, w/ Tomball School District & Beckendorf Intermediate School, Tomball TX. Sam Houston State University Professional Development Center.

CONFERENCE PRESENTATIONS

Shashidhar, N.K., & Cooper, P.A. Teaching Malware Analysis: The Design Philosophy of a Model Curriculum. 4th International Symposium on Digital Forensics and Security. Little Rock, AK. April 2016.

Chandragari, A. Cooper, P.A., Liu, Q. Implementing Secure Communication on Short Messaging. 2nd International Symposium on Digital Forensics and Security. Sam Houston State University, Huntsville, TX. May 2014.

Varol, C., Cooper, P.A., Varol A. Turkiye'de Adli Bilisim Egitimi. 1st International Symposium on Digital Forensics and Security. Elazig, Turkey. May 2013.

Cooper, P.A, Chen, L., "Secure Last Acknowledged Packet Routing Algorithm (SLAPRA) for MANETs" 2012 International Conference on Communications and Computers (ICNCC 2012). Hong Kong, China December 29-30, 2012.

Liu, Q. & Cooper, P.A. "Shift Recompression-Based Feature Mining for Detecting Content-Aware Scaled forgery in JPEG Images". 12th Multimedia Data Mining Workshop, Beijing, China, August 12-16th 2012.

Liu, Q., Li, X, Chen, L., Cooper, P.A., Chen, Z., Qiuao, M., and Sung, H. (2012). Identification of Smartphone Image Source and Manipulation" in Special Session of Data Mining and Computational Intelligence for Digital Forensics and Information Assurance (DMCIDFIA), in conjunction with the 25th International Conference on Industrial, Engineering and Other Applications of Applied Intelligence Systems (IEA/AIE 2012), Dalian, China, June 9-12, 2012.

"A New Approach to Detecting Seam-Carved Forgery in JPEG Images (Poster session with Qingzhong Liu). 2012 NIJ Conference, Washington DC June 18th -20th 2012.

"On the Development of Collaborative Degree Programs – Texas & Turkey" 22nd Annual Conference of the Association of Universities for Democracy (AUDEM), Dubrovnik, October 2011.

"Towards Standards in Digital Forensics Education" ITiCSE Annual Conference, Ankara, Turkey June 25th-June 30th 2010.

"Globalization and Balkanization: The Development of IT Services in US Universities or How University Computing Trawled the Seven C's in Search of Hegemony". 20th Annual Conference of the Association of Universities for Democracy (AUDEM), Bursa, Turkey, November 2009.

"Why Literacy is Not Enough: Knowledge, Being and Reframing. Information Processing Society, International-Amalfi. March 2007

"Computer Literacy and the University". 17th Annual Conference of the Association of Universities for Democracy (AUDEM) Katowice, Poland. November 2006.

"The Ten (Information Security) Commandments". 17th Annual Conference of the Association of Universities for Democracy (AUDEM) Katowice, Poland. November 2006.

 "The Philosophy of Discipline: Two Analogies In Pursuit Of the Nature of Academics" 16th Annual Conference of the Association of Universities for Democracy (AUDEM) Yalta, Ukraine. October 2005.

"Matrioshka and the Egg: Perspectives in Information Security" 16th Annual Conference of the Association of Universities for Democracy (AUDEM) Yalta, Ukraine. October 2005.

"Speciation in the Computing Sciences: Digital Forensics as an Emerging Academic Discipline". Information Processing Society, International Pescara, July 2005. Also presented at the 2005 Information Security Curriculum Development Conference, Kennesaw State University, Kennesaw, Georgia. Sept 2005.

"The Role of Artifact Development in Promotion and Tenure Decision Making for Computer Science and MIS Faculty. 15th Annual conference of the Association of Universities for Democracy (AUDEM) Pecs, Hungary. November 2004.

"Innovation and Accreditation: Opposing Forces in Computer Science" 14th Annual conference of the Association of Universities for Democracy (AUDEM), Vilnius, Lithuania, October 26-29th, 2003.

 "The State of Computer Science Education in the United States". 13th Annual conference of the Association of Universities for Democracy (AUDEM), Timisoara, Romania, November 6-12th, 2002.

"Modeling Multimedia Displays Using Action Based Temporal Logic." Sixth IFIP Working Conference on Visual Database Systems, Brisbane, Australia. May 29th –June 3rd 2002.

Computer-Mediated Communication, The Infosphere and the Virtual Learning Community Proceedings of the 2001 SITE International Conference.

Building Client-Server Systems. Exercises in Network Communication. Eleventh South Central Small Colleges Computing Conference, Corpus Christi, TX. April 2000

Structured Communication in Java. (with Ken Hartness). Eleventh South Central Small Colleges Computing Conference, Corpus Christi, TX. April 2000

An Integrated Introductory Mathematics and Computer Science Course. Joint Mathematical Meetings, San Antonio, TX, January 15th 1999.

 'Operating Systems' 3rd Annual Sam Houston Conference for Secondary School Students and Teachers. Huntsville, TX , Jan 1999.

'Designing Internet Instructional Environments' ACM/SIGCSE/SIGCUE 6th Annual Conference on the Teaching of Computing/3rd Annual Conference on Integrating Technology into Computer Science Education. Dublin, Ireland. August 1998.

'Truth or Trend? Test!' with Goad R.E. Conference for the Advancement of Mathematics Teaching. San Antonio, TX. July 1998.

'Redefining Technology Literacy – Again!' Society for Information Technology & Teacher Education 9th International Conference. Washington D.C. March 1998

'Transparent Technology'. Annual Texas Region Six Conference on Technology in Education. Texas A&M University, Bryan TX. November 1997.

Tutorial in 'Distance Education and the World Wide Web'. Seventh South Central Small Colleges Computing Conference, Wichita Falls, TX. April 1996

Panel Discussion. 'Going on-line with Class'. Seventh South Central Small Colleges Computing Conference, Wichita Falls, TX. April 1996

Tutorial in 'Advanced Visual BASIC Features'. Sixth South Central Small Colleges Computing Conference, Shreveport LA. April 1996

The Paperless Business Statistics Course. Seventh Annual Computers on Campus Conference, Houston TX. November 1995.

Tutorial in 'Visual BASIC' Fifth South Central Small Colleges Computing Conference, Amarillo, TX. April 1995

INVITED PRESENTATIONS

Cooper, P.A. "Beyond Boundaries: A Perspective on the Limitations of Machine Translation". 9th International Conference on Professional Communication and Translation Studies. Politehnica University of Timisoara, Timisora, Romania. April 2015.

Cooper, P.A. "Building a Better Mousetrap: Forensics as a Service". 1st International Symposium on Digital Forensics and Security. Elazig, Turkey. May 2013.

Cooper, P.A. "International Legal Issues in Cyberspace". Firat University, Turkey. May 23rd 2011.

Cooper, P.A. Towards Standards in Digital Forensics Education. Firat University, Turkey. July 8th 2010

Cooper, P.A. "Digital Forensics". Information Processing Society, International-Amalfi, March 2007

Murff, K., & Cooper, P.A. "Sam Houston State University Center of Excellence in Digital Forensics" presented to the Gulf Coast High Technology Crimes Task Force, September 2005. Also presented to the Houston Chapter of Infragard, October 2005 and the Secret Service High Technology Crimes Task Force, October 2005.

PROFESSIONAL ASSOCIATIONS

Conference Paper Referee
Consortium for Computing in Small Colleges – Eastern Conference 2005.

Consortium for Computing in Small Colleges – South Central Conference 1998 – 2006

Conference on Integrating Technology into Computer Science Education 2000-2002, 2006-10

InfoSecCD 2005, Information Security Conference, Kennesaw State University Information Processing SI-Pescara Conference 2005.

SIGCSE 2006-11

IACIS 2008.

Book Reviewer
Fourazan, Data Communications and Networks. 2004

Grembi. Building a Secure Software System. 2007.

Student Paper Judge: 2005 Information Security Curriculum Development Conference, Kennesaw State University, Kennesaw, Georgia. Sept 2005

Professional Service

President, Alliance of Universities for Democracy, 2012 - 2015
US Vice President, Alliance of Universities for Democracy 2009 -2012
Board Member, Alliance of Universities for Democracy, 2005-2009

Board Member, Dan Reeves Mathematics Center, Huntsville Texas 1998-present
Nominated for Sam Houston State University Excellence in Research Award. Spring
2003, Spring 2004

1998 International Who's Who of Professionals

University Committee Service

Academic Policy Council 2005-2014

Academic Affairs Council 2003-present

College of Arts and Sciences Dean Search Committee 2005/6

Faculty Grievance Committee 2005/6, 2009-2015

Texas Center for Forensic Science/Center of Excellence for Digital Forensics Steering Committee Chair Spring 2004

Mass Communication Curriculum Review Committee Chair Spring 2004

Department of Mass Communication Chair Search Committee (Chair) 2004

Admissions Appeals Committee 2000-2002

Parking Appeals Committee 1999-2002

Faculty Evaluation Committee 2001-2004 (Committee Chair 2002-4)

Education Preparation Advisory Council 2002-present

Computer Science Undergraduate Curriculum Committee 1997 – 2002. (Chair from 1998-2002)

Computer Science Graduate Faculty 1997-present

Professional Membership

Association for Computer Machinery 1993-present

IEEE 2005

Consortium for Computing in Small Colleges 1992-2006

Association for the Advancement of Computers in Education 1996-2001