Biographical Sketch: Sen-ching Samson Cheung

Professional Preparation

University of Washington	Computer Engineering	B.S. (summa cum lau	de) 1992
University of California, Berkeley	Electrical Engineering	Ph.D.	2002
Lawrence Livermore National Lab.	Scientific Data Mining	Post-doctoral 2	2002-2004

Appointments

2010 - Present	Associate Professor, Department of Electrical & Computer Engineering and Center for
	Visualization & Virtual Environments, University of Kentucky
2008 - 2008	Adjunct Professor, Electrical Engineering, Joint Institute of University of Michigan and
	Shanghai Jiao Tong University, Shanghai, China
2004 - 2010	Assistant Professor, Department of Electrical & Computer Engineering and Center for
	Visualization & Virtual Environments, University of Kentucky
2002 - 2004	Researcher, Center for Applied Scientific Computing, Lawrence Livermore National Lab
1998 - 2002	Research Assistant, Electrical Engineering and Computer Sciences, UC Berkeley
1995 - 1998	Research Engineer, VTEL (formerly Compression Labs), San Jose, California
1992 - 1995	Research Assistant, Electrical Engineering and Computer Sciences, UC Berkeley

Ten selected publications since 2012:

- 1. Shen, J., C. Ti, A. Raghunathan, S.-C. Cheung, and R. Patel. 2014. Automatic Video Self Modeling for Voice Disorder. **Multimedia Tools and Applications**. DOI. 10.1007/s11042-014-2015-1
- Sajid, H. and S.-C. Cheung. 2014. Background Subtraction under Sudden Illumination Change. In IEEE International Workshop on Multimedia Signal Processing (MMSP 2014), Sept. 22-24, 2014, DOI: 10.1109/MMSP.2014.6958814.
- 3. Wang, Z., Y. Luo and S.-C. Cheung. 2014. Efficient Multi-party Computation with Collusion-deterred Secret Sharing. In **IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2014),** May 4-9, 2014, pp. 7401-7405.
- Zhao, J., D. Hawkes, R. Yoshida, and S.-C. Cheung. 2013. Approximate techniques in solving optimal camera placement problems. International Journal of Distributed Sensor Networks. Vol. 2013(2013) Article ID 241913.
- 5. Shen, J., S.-C. Cheung, and J. Zhao. 2013. Virtual Mirror by Fusing Depth and Color Cameras. **IEEE Transactions on Image Processing**, vol. 22, issue 9, pp. 1-16.
- Shen, J., and S.-C. Cheung. 2013. Layer Depth Denoising and Completion for Structured-Light RGB-D Cameras. In IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2013), June 25-27, 2013, pp. 1187-1194.
- 7. Ukaobah, N., J. Shen and S.-C. Cheung. 2013. MEBOOK: a novel device using video self-modeling to enhance literacy among children with ASD. In **International Meeting for Autism Research (IMFAR)**, May 2-4, 2013.
- 8. Zhao, J. and S.-C. Cheung. 2012. Human Segmentation by Geometrically Fusing Visible-light and Thermal Imaginary. **Multimedia Tools and Applications**. DOI 10.1007/s11042-012-1299-2.
- 9. Paruchuri, J., Y. Luo and S.-C. Cheung, 2012. Preserving and Managing Privacy Information in Video Surveillance Systems. Chapter 5 in **Effective Surveillance for Homeland Security: Balancing Technology and Social Issues**, edited by F. Flammini, R. Setola & G. Franceschetti, CRC Press/Taylor & Francis, pp. 87-109.
- Luo, Y., S.-C. Cheung, R. Lazzeretti, T. Pignata, and M. Barni. 2012. An Efficient Protocol for Private Iris-code Matching using Garbled Circuits. In IEEE International Conference on Image Processing (ICIP 2012), Sept. 30-Oct. 3, 2012, pp. 2653-2656

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Synergistic Activities

- 1. Lead PI of the NSF I-Corps project on "Video Interface for Behavioral Evaluation" (NSF-1444022, 2014)
- 2. Lead PI of the NSF-funded project on "SHB:Type II(INT): Synthesizing Self-Model and Mirror Feedback Imageries with Applications to Behavior Modeling for Children with Autism". (NSF-1237134, 2012-2016). The PI team has 4 PIs over two different institutions.
- 3. Sole PI of the NSF-funded project on "CIF:Small:Privacy Protection of Multimedia Processing" (NSF-1018241, 2010-2014).
- 4. Lead Guest Editor of Special Issue on
 - a. Privacy and Trust Management in Cloud and Distributed Systems in IEEE Transactions on Information Forensics and Security (2012)
 - Enhancing Privacy Protection in Multimedia Systems in EURASIP Journal of Information Security (2009)
- 5. Associate Editor of
 - a. IEEE Transactions on Information Forensics and Security since 2013
 - b. Signal Processing: Image Communications since 2011
 - c. IEEE Transactions of Multimedia (2011-2013)
 - d. American Statistical Association Journal on Statistical Analysis and Data Mining since 2009.
 - e. EURASIP Journal on Information Security since 2008

6. Member of

- a. Multimedia Signal Processing Technical Committee, IEEE Signal Processing Society (since 12/2013)
- b. Information Forensics & Security Technical Committee, IEEE Signal Processing Society (since 10/2012)
- c. Multimedia Communications Technical Committee, IEEE Communication Society, (since 11/2010)
- Multimedia Systems & Applications Technical Committee, IEEE Circuits and Systems Society (since 9/2007)

7. Chair of

- TPC Area on Image and Video Biometric Analysis for IEEE International Conference on Image Processing (ICIP 2015)
- b. Information forensics and Security Track for IEEE China Summit and International Conference on Signal and Information Processing 2015 (ChinaSIP 2015)
- c. TPC Area on for IEEE International Conference on Multimedia and Expo (ICME 2015)
- d. Special Session on "3D Imaging for health monitoring and interventions" in IEEE International Conference on Multimedia and Expo (ICME 2015)
- e. Session on "Multimedia Encryption, Secure Computations, and Data Hiding" in IEEE International Conference on Acoustics, Sound, and Signal Processing 2014 (ICASSP 2014)
- f. TPC Area on Multimedia Security, Privacy and Forensics for IEEE International Conference of Multimedia and Expo 2013 (ICME 2013)
- g. Publicity (US) for the Fifth IEEE/ACM International Conference of Distributed Smart Cameras (ICDSC 2011)
- h. Session on "Techniques and Applications for Smart Cameras (part II)" in Fourth IEEE/ACM International Conference of Distributed Smart Cameras (ICDSC 2010)