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JEAN Y. SONG (송진영)

education

Ph.D., Electrical Engineering and Computer Science
The University of Michigan, Ann Arbor, 2019

M.S., Electrical and Electronic Engineering
Yonsei University, Seoul, South Korea, 2011

B.S., Electrical and Electronic Engineering (Minor, Psychology)
Yonsei University, Seoul, South Korea, 2009

honors & awards

- ACM CSCW 2019, Best Paper Honorable Mention Award, 2019
- ACM IUI 2018, Best Student Paper Honorable Mention Award, 2018
- Volunteer Honor for distinguished volunteering, the Mayor of Seoul, 2010
- Undergrad Creative Research Excellence Award, Yonsei Univ. Dept. of EE, 2008
- Merit-based Scholarship, Yonsei University, 2005

publication

Refereed Journal and Conference Papers

John Joon Young Chung, **Jean Y. Song**, Sindhu Kutty, Sungsoo Hong, Juho Kim, Walter S. Lasecki. Efficient Elicitation Approaches to Estimate Collective Crowd Answers. *In Proceedings of the ACM International Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2019).* *Best Paper Honorable Mention Award*

Jean Y. Song, Raymond Fok, Juho Kim, Walter S. Lasecki. "FourEyes: Leveraging Tool Diversity as a Means to Improve Aggregate Accuracy in Crowdsourcing". *In ACM Transactions on Interactive Intelligent Systems, Volume 19, Issue 1, No. 3 (TiiS 2019).*

Jean Y. Song, Stephan J. Lemmer, Michael X. Liu, Shiyan Yan, Juho Kim, Jason J. Corso, Walter S. Lasecki. "Popup: Reconstructing 3D Video Using Particle Filtering to Aggregate Crowd Responses". *In Proceedings of the ACM International Conference on Intelligent User Interfaces (IUI 2019) [25% Acceptance Rate]*

Jean Y. Song, Raymond Fok, Alan Lundgard, Fan Yang, Juho Kim, Walter S. Lasecki. "Two Tools are Better Than One: Tool Diversity as a Means of Improving Aggregate Crowd Performance". *In Proceedings of the ACM International Conference on Intelligent User Interfaces (IUI 2018) [23% Acceptance Rate]* Best Student Paper Honorable Mention Award

Poster and Workshop Papers

Andrew M. Vernier, **Jean Y. Song**, Edward Sun, Allison Kench, Walter S. Lasecki. Towards Universal Evaluation of Image Annotation Interfaces. *In Proceedings of the ACM Symposium on User Interface Software and Technology (UIST 2019).*

Jean Y. Song, Minsuk Chang, Arti Thakur, Manav Rao, Juho Kim. "Interactive Clustering of Large-Scale Images with a Human-Machine Hybrid Workflow". *Korea Software Congress (KSC 2018).*

Jean Y. Song, Raymond Fok, Fan Yang, Kyle Wang, Alan Lundgard, Walter S. Lasecki, "Tool Diversity as a Means of Improving Aggregate Crowd Performance on Image Segmentation Tasks". *Workshop on Human Computation for Image and Video Analysis, at the AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2017).*

Sai R. Gouravajhala, **Jean Y. Song**, Jinyeong Yim, Raymond Fok, Yanda Huang, Fan Yang, Kyle Wang, Yilei An, Walter S. Lasecki. "Towards Hybrid Intelligence for Robotics". *In Collective Intelligence Conference (CI 2017).*

Jean Y. Song, Charles R. Meyer, "2D-3D Image Registration using Thin-Plate Spline and Volume Rendering". *SPIE Medical Imaging 2015.*

Jean Y. Song, Jeffrey A. Fessler, Charles R. Meyer, "Adaptive Filtering on Conditional Mutual Information for Intermodal Non-Rigid Image Registration". *IEEE NSS/MIC 2014.*

Jean Y. Song, Honglin Jin, Yoonsik Choe, "Image Tamper Detection Method Based on Data Hiding". *Conference on Image Processing and Image Understanding (IPIU 2010).*

Jean Y. Song, Honglin Jin, Yoonsik Choe, "Hash Value Delay Hiding for Image Authentication", *EURO-SIAM 2010.*

Thesis

Jean Y. Song, "Eliciting and Leveraging Input Diversity in Crowd-Powered Intelligent Systems". *University of Michigan Ph.D. Thesis.* 2019.

Jean Y. Song, "Fine Localized Image Tamper Detection based on Reversible Data Hiding and Chaotic Logistic Map". *Yonsei University Master's Thesis.* 2011.

experiences

Research Experience

Graduate Student Research Assistant

Crowds and Machines (CROMA) Lab, EECS, Univ. of Michigan, Winter 2017 - present

- *Building crowdsourcing systems for human-machine hybrid intelligent vision*

Graduate Student Research Assistant

Digital Image Processing Lab, Dep. of Radiology, Univ. of Michigan, Fall 2012 - Winter 2015

- *2D/3D non-rigid image registration of microscopy & colonoscopy images*
- *Feature classification for normal & cancerous tissue segmentation of colonic cancer*

Graduate Researcher

Image and Information Lab (IILAB), EE, Yonsei University, Fall 2009 - Winter 2011

- *Reducing bit-rate of video codec of Next-generation Digital TV Broadcasting System*
- *Reducing the decoder complexity of High Efficient Video Coding (HEVC) Standard*
- *Fine detection of tampered area of an image using watermarking*

Undergraduate Research Assistant

Center for Signal Processing Research, Yonsei University, Winter 2009

- *Implementing framework of Scalable Video Coding (SVC) Player using MFC program*
- *Improving data transfer efficiency of security cameras using self-detection algorithms*

Undergraduate Research Assistant

Human Development Lab, Dep. of Psychology, Yonsei University, 2008

- *Understanding child development in language and morality domain*

Teaching experience

Teaching Assistant

Yonsei University, Seoul, South Korea, Winter 2009

- EEE2060: *Signal and System* (*Lecturer*: *Prof. Yoonsik Choe*)

service

Reviewer

WWW 2020, CHI 2019, CSCW 2019

references

Walter S. Lasecki (wlasecki@umich.edu)

Juho Kim (juhokim@kaist.ac.kr)