

RESEARCH INTERESTS

Learning Technologies:

Experiential learning; Culturally-relevant learning; STEM education

Child-Computer Interaction:

Wearables; Maker technologies; Creativity support systems

Technologies for Health and Well-being:

Everyday-inspired media; Meaningful media; Positive computing

Objective:

I study human behavior in existing or designed technological contexts. Within that orientation, my research is both basic and applied, and thus contributes simultaneously to theory and design.

APPOINTMENTS

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| University of Florida, <i>Gainesville, FL</i> | Assistant Professor <i>Department of Computer and Information Science and Engineering</i> | 2018 – Present |
| Texas A&M University, <i>College Station, TX</i> | Assistant Professor <i>Department of Visualization</i> | 2015 – 2018 |
| Texas A&M University, <i>College Station, TX</i> | Lecturer <i>Department of Visualization</i> | 2014 – 2015 |

EDUCATION

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| Texas A&M University, <i>College Station, TX</i> | Doctor of Philosophy <i>Department of Architecture with focus in Human-Computer Interaction</i> Dissertation Advisors: Dr. Francis Quek / Dr. Rodney Hill | 2013 – 2015 |
| Virginia Tech, <i>Blacksburg, VA</i> | Master of Science <i>Department of Computer Science & Applications</i> Thesis Advisors: Dr. Benjamin Knapp / Dr. Francis Quek | 2010 – 2013 |
| Virginia Tech, <i>Blacksburg, VA</i> | Graduate Certificate in Human-Computer Interaction <i>Department of Computer Science & Applications</i> | 2010 – 2013 |
| National University of Singapore, <i>Singapore</i> | Bachelor of Social Sciences (1st Class Honors) <i>Department of Communication and New Media</i> Thesis Advisor: Dr. Timothy Marsh | 2005 – 2009 |

FEDERAL GRANTS

Awarded

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| [G.1] Principal Investigator | <i>Lived Science Narratives: Meaningful Elementary Science through Wearable Technologies</i> Chu, S. L. (PI). <i>National Science Foundation</i> , CISE Research Initiation Initiative (CRII) Cyberlearning. \$174,989. Responsible for 100%. NSF Grant Abstract: https://www.nsf.gov/awardsearch/showAward?AWD_ID=1566469&HistoricalAwards=false Program info: https://www.nsf.gov/pubs/2017/nsf17552/nsf17552.htm | Awarded (1 Sept 2016 – 31 Aug 2018) |
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| [G.2] | Principal Investigator | <i>REU Supplement: Lived Science Narratives</i> Chu, S. L. (PI). <i>National Science Foundation</i> , CISE Research Initiation Initiative (CRII) Cyberlearning. \$16,000. Responsible for 100%. | Awarded (1 Sept 2017 – 31 Aug 2018) |
| [G.3] | Principal Investigator | <i>To Enact, To Tell, To Write: A Bridge to Expressive Writing through Digital Enactment</i> Chu, S. L. (PI), Quek, F. (Co-PI) and Irby, B. (Co-PI). <i>National Science Foundation</i> , Cyberlearning. \$549,820. Responsible for \$274,910. NSF Grant Abstract: https://www.nsf.gov/awardsearch/showAward?AWD_ID=1736225&HistoricalAwards=false Program info: https://www.nsf.gov/pubs/2017/nsf17520/nsf17520.htm | Awarded (1 Sept 2017 – 31 Aug 2020) |
| [G.4] | Co-Principal Investigator | <i>Making in The Colonias: Motivating STEM Participation through Making as Micro-Manufacture</i> Quek, F. (PI), Chu, S. L. (Co-PI), Natarajarathinam, M. (Co-PI) and Kuttolamadom, M. (Co-PI). <i>National Science Foundation</i> , EAGER. \$300,000. Responsible for \$75,000. NSF Grant Abstract: https://www.nsf.gov/awardsearch/showAward?AWD_ID=1623543&HistoricalAwards=false Program info: https://www.nsf.gov/pubs/policydocs/pappguide/nsf09_1/gpg_2.jsp#IID2 | Awarded (1 Sept 2016 – 31 Aug 2018) |
| [G.5] | Co-Principal Investigator | <i>Making the Maker: A Pathway to STEM for Elementary School Students</i> Quek, F. (PI), Chu, S. L. (Co-PI), Larke, P. (Co-PI), Schlegel, R. (Co-PI) and Burlbaw, L. (Co-PI). <i>National Science Foundation</i> , Innovative Technology Experiences for Students and Teachers (ITEST), NSF-DRL- 1433770. \$1,083,211.00. Responsible for \$180,535. NSF Grant Abstract: https://nsf.gov/awardsearch/showAward?AWD_ID=1433770 Program info: https://www.nsf.gov/pubs/2017/nsf17565/nsf17565.htm | Awarded (1 Sept 2014 – 31 Aug 2017) |

PUBLICATIONS

***Note 1:** The publication culture in Human-Computer Interaction (HCI) tends to differ from that of some other disciplines. Whereas many disciplines consider journals as hallmarks of excellence, in HCI, publications in highly competitive peer-reviewed conferences provide as much certification as publishing in a journal. This culture is similar to that of the Computer Science field, where fast-paced advances in technology necessitates rapid dissemination of knowledge.

***Note 2:** Where available, acceptance rates (AR) or impact factors (IF) are given in brackets below. Journal impact information can be found at: <http://www.scimagojr.com>

Peer-Reviewed Conference Proceedings

- [P.35]** Berman, A., Deuermeyer, E., Nam, B., Chu, S. L., & Quek, F. (2018). Exploring the 3D printing process for young children in curriculum-aligned making in the classroom. In *Proceedings of the 17th ACM Conference on Interaction Design and Children* (pp. 681-686). ACM.
- [P.34]** Okundaye, O., Chu, S. L., Quek, F., Berman, A., Natarajarathinam, M. and Kuttolamadom, M. (2018). From Making to Micro-Manufacture: Catalyzing STEM Participation in Rural High Schools. *Proceedings of FabLearn Europe 2018*. Trondheim, Norway.
- [P.33]** Garcia, B., Chu, S. L., Nam, B. and Banigan, C. (2018). Wearables for Learning: Examining the Smartwatch as a Tool for Situated Science Reflection. In *Proceedings of the International Conference on Human Factors in Computing Systems (CHI 2018)*. ACM. Montreal, Canada.
- [P.32]** Deuermeyer, E. Martin, R., Suarez, M., Meister, S., Quek, F., Chu, S. L., Burlbaw, L., Larke, P., Schlegel, R. and Petershach, G. (2018). How to Support Maker teachers in the classroom: Teacher perceptions of ‘Making’, Maker-spaces, and Maker-Teachers. In *Proceedings of the American Educational Research Association (AERA) Annual Meeting*. New York City, NY.

- [P.31] **Chu, S. L.**, Garcia, B. and Nam, B. (2018). The Smartwatch as a Situated Reflection Tool for Everyday Science. In Proceedings of the *American Educational Research Association (AERA) Annual Meeting*. New York City, NY.
- [P.30] Kuttolamadom, M., Mitchell, J., Natarajarathinam, M., **Chu, S. L.** and Quek, F. (2018). Motivating STEM Participation through a “Making as Micro-Manufacture (M3)” Model. In *Proceedings of American Association for Engineering Education (ASEE) Annual Conference*. Salt Lake City, Utah.
- [P.29] **Chu, S. L.**, Quek, F., Bhangaonkar, S. and Berman, A. (2017). Physical Making Online: A Study of Children’s Maker Websites. In Proceedings of *FabLearn 2017: 7th Annual Conference on Creativity and Making in Education*. Stanford University, Palo Alto. (AR: ~40%)
- [P.28] **Chu, S. L.**, Quek, F., Deuermeyer, E., Martin, R., Berman, A., Suarez, M., Zarei, N., Nam, B. and Banigan, C. (2017). From Classroom-Making to Functional-Making: A Study in the Development of Making Literacy. In Proceedings of *FabLearn 2017: 7th Annual Conference on Creativity and Making in Education*. Stanford University, Palo Alto. (AR: ~40%)
- [P.27] **Chu, S. L.**, Deuermeyer, E., Martin, R., Quek, F., Berman, A., Suarez, M., Zarei, N., Nam, B. and Banigan, C. (2017). Becoming Makers: Examining ‘Making’ Literacy in the Elementary School Science Classroom. In Proceedings of the *International Conference on Interaction Design & Children (IDC ’17)*. Stanford, CA. ACM.
- [P.26] **Chu, S. L.**, Schlegel, R., Quek, F., Christy, A. and Chen K. (2017). I Make, Therefore I Am: An Investigation of Curriculum-based Making on Children’s Self-identity. In Proceedings of the *International Conference on Human Factors in Computing Systems (CHI ’17)*. Denver, CO. ACM. (AR: ~25%)
- [P.25] **Chu, S. L.** and Garcia, B. (2017). Toward Wearable App Design for Children’s In-the-World Science Inquiry. In Proceedings of the *11th International Conference on Tangible, Embedded and Embodied Interaction (TEI ’17)*. Yokohama, Japan. ACM. (AR: ~27%)
- [P.24] **Chu, S. L.**, Garcia, B., Quance, T., Geraci, L., Woltering, S. and Quek, F. (2016). Understanding Storytelling as a Design Framework for Cognitive Support Technologies for Older Adults. In Proceedings of *International Symposium on Interactive Technologies for Ageing Populations (IxAP) 2016*. Kochi, Japan. ACM. **[Best Paper Award]**
- [P.23] Berman, A., Garcia, B., Nam, B., **Chu, S. L.** and Quek, F. (2016). Toward a Making Community of Practice: The Social Aspects of Elementary Classroom-Based Making. In Proceedings of *FabLearn 2016: 6th Annual Conference on Creativity and Making in Education*. Stanford University, Palo Alto. (AR: ~ 40%)
- [P.22] **Chu, S.**, Angello, G., Suarez, M. and Quek, F. (2016). A Systemic Analysis of Making in Elementary Schools: Understanding Making for Children through Activity Theory. In Proceedings of the *International Conference on Advanced Learning Technologies (ICALT ’16)*. Austin, TX. (AR: 29.64%)
- [P.21] **Chu, S.**, Saenz, M. and Quek, F. (2016). Connectors in Making: Investigating Children’s Motoric Abilities in Making. In Proceedings of the *International Conference on Interaction Design & Children (IDC ’16)*. Manchester, UK. (AR: ~ 47%)
- [P.20] Angello, G., **Chu, S.**, Quek, F., Osazuwa, O. and Zarei, N. (2016). Making as the New Colored Pencil: Translating Elementary Curricula into Maker Activities. In Proceedings of *International Conference on Interaction Design & Children (IDC ’16)*. Manchester, UK. (AR: ~ 47%)
- [P.19] **Chu, S. L.**, Angello, A., Quek, F. and Pyle, S. (2016). Supporting Scientific Model Thinking through Curriculum-based Making. In Proceedings of *FabLearn Europe 2016*. Preston, UK.
- [P.18] **Chu, S.**, Quek, F., Saenz, M., Bhangaonkar, S. and Okundaye, O. (2015). Enabling Instrumental Interaction through Electronics Making: Effects on Children’s Storytelling. In Proceedings of *International Conference on Interactive Digital Storytelling (ICIDS ’15)*. Copenhagen, Denmark. (AR: ~ 37%)
- [P.17] Arita, J., Seo, J, **Chu, S.** and Quek, F. (2015). The Role of Materiality in Tangibles for Young Children’s Digital Art Drawings. In Proceedings of *Interaction Design & Children (IDC ’15)*. Boston, MA. (AR: ~ 23%)
- [P.16] **Chu, S.**, Quek, F. and Sridharamurthy, K. (2015). Augmenting Children’s Creative Self-Efficacy and Performance through Enactment-Based Animated Storytelling. In Proceedings of the *9th International Conference on Tangible, Embedded and Embodied Interaction (TEI ’15)*. Stanford University, CA. ACM. (AR: ~ 28%)
- [P.16] Seo, H., Arita, J., **Chu, S.**, Quek, F. and Aldriedge, S. (2015). Material Significance of Tangibles for Young Children. In Proceedings of the *9th International Conference on Tangible, Embedded and Embodied Interaction (TEI ’15)*. Stanford University, CA. ACM. (AR: ~ 28%)

- [P.15] **Chu, S.** and Quek, F. (2014). Exploring Performative Authoring as a Story Creation Approach for Children. In Proceedings of *International Conference on Interactive Digital Storytelling (ICIDS '14)*. Singapore, Singapore. (AR: ~ 28%)
- [P.15] **Chu, S.,** Quek, F. and Sridharamurthy, K. (2014). Ready...Action! A Performative Authoring System for Children to Create Animated Stories. In Proceedings of *the 11th Advances in Computer Entertainment Technology Conference (ACE '14)*. Madeira, Portugal. (AR: ~ 40%)
- [P.14] **Chu, S.** and Quek, F. (2014). The Effects of Visual Contextual Structures on Children's Imagination in Story Authoring Interfaces. In Proceedings of *Interaction Design & Children (IDC '14)*. Aarhus, Denmark. (AR: ~ 30%)
- [P.13] **Chu, S.,** Quek, F. and Tanenbaum, J. (2013). Performative Authoring: Nurturing Storytelling in Children through Imaginative Enactment. In Proceedings of *the International Conference on Interactive Digital Storytelling (ICIDS '13)*. Istanbul, Turkey. **[Best Paper Award]** (AR: ~ 27.4%)
- [P.12] **Chu, S.** and Quek, F. (2013). Things to Imagine With: Designing for the Child's Creativity. In Proceedings of *Interaction Design & Children (IDC '13)*. New York City, NY: ACM. (AR: ~ 33%)
- [P.11] **Chu, S.,** Quek, F., Gusukuma, L. and Tanenbaum, J. (2013). The Effects of Physicality on the Child's Imagination. In Proceedings of *Creativity and Cognition '13*. Sydney: Australia. (AR: ~ 32%)
- [P.10] Chung, H., **Chu, S.,** Quek, F. and North, C. (2013). A Comparison of Two Display Ecology Models for Collaborative Sensemaking. In Proceedings of *the 2nd International Symposium on Pervasive Displays (PerDis '13)*. Mountain View: CA. 4-5 June, 2013. (AR: ~ 70%)
- [P.9] **Chu, S.** and Quek, F. (2013). Information Holodeck: Thinking in Technology Ecologies. In proceedings of INTERACT '13. Cape Town: South Africa. IFIP-Springer LNCS. (AR: ~ 31%)
- [P.8] **Chu, S.,** Quek, F., Wang, Y. and Hartson, R. (2013). *Finding-NEVO: Toward Radical Design in HCI*. In Proceedings of *INTERACT '13*. Cape Town: South Africa. IFIP-Springer LNCS. (AR: ~ 31%)
- [P.7] **Chu, S.,** Federovskaya, E., Quek, F., and Snyder, J. (2013). "The Effect of Familiarity on Perceived Interestingness of Images". In Proceedings of *IS&T/SPIE International Conference on Human Vision & Electronic Imaging XVIII*, Vol. 8651, SPIE: Burlingame, CA. (AR: ~40%)
- [P.6] **Chu, S.,** Quek, F. and Lin, X. (2011) Studying Medium Effects on Children's Creative Processes. In Proceedings of *Creativity & Cognition '11*. ACM: pp. 3-12: Atlanta, GA. (AR: ~ 23%)
- [P.5] **Chu, S.,** Quek, F., Endert, A., Chung, H. and Sawyer, B. (2012). The Physicality of Technological Devices in Education: Building a digital experience for learning. In Proceedings of *IEEE International Conference on Advanced Learning Technologies (ICALT 2012)*. Rome, Italy. (AR: ~ 23%)
- [P.4] Sawyer, B., Quek, F., Wong, W., Motani, M., **Chu Yew Yee, S.** and M. Perez-Quinones (2012). Using Physical-Social Interactions to Support Information Re-finding. In Proceedings of *ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2012)*. Austin, TX. (AR: ~ 23%)
- [P.3] Duh, H.B.L., **Chu Yew Yee, S.L.,** Chen, V.H.H. Gu, Y. (2010). A Narrative-driven Design Approach for Casual Games with Children. In Proceedings of *SIGGRAPH '10: the International Conference on Computer Graphics and Interactive Techniques (Game paper section)*. Los Angeles, CA. (AR: ~ 22%)
- [P.2] **Chu Yew Yee, S. L.,** Duh, H. B. L. & Quek, F. (2010). Investigating Narrative in Mobile Games for Seniors. In *CHI 2010, 28th ACM Conference on Human Factors in Computing Systems*, pp. 669-672. Atlanta, GA. **[Honorable Mention for Best Paper]** (AR: ~ 22%)
- [P.1] **Chu Yew Yee, S. L. & Marsh, T.** (2009). Investigating fun and learning in educational games. In *ISAGA 2009, the International Simulation and Gaming Association conference '09*. Singapore, Singapore. (AR: ~ 36%)

Journal Articles

- [J.4] **Chu, S.,** Deuermeyer, E., and Quek, F. (2017). Supporting Scientific Modelling through Curriculum-based Making in Elementary School Science Classes. In the *International Journal of Child-Computer Interaction: Special Issue on Fabrication in Learning*. (IF: 1.469)
<https://www.journals.elsevier.com/international-journal-of-child-computer-interaction/>

- [J.3] **Chu, S.**, Angello, G., Saenz, M. and Quek, F. (2016). Fun in Making: Understanding the Experience of Fun and Learning through Curriculum-based Making in the Elementary School Classroom. *Journal of Entertainment Computing: Special issue on Maker Technologies to Foster Engagement and Creativity in Learning (Make2Learn)*, 18, pp. 31-40. (IF: 1.615) <http://dx.doi.org/10.1016/j.entcom.2016.08.007>
<https://www.journals.elsevier.com/entertainment-computing/>
- [J.2] **Chu, S.**, Quek, F., Bhangaonkar, S., Ging, A. B. and Sridharamurthy, K. (2015). Making the Maker: Nurturing the Maker Mindset. In the *International Journal of Child-Computer Interaction: Special Issue on Digital Fabrication in Education*, 5, pp 11-19. (IF: 1.469) <http://dx.doi.org/10.1016/j.ijcci.2015.08.002>
- [J.1] Chung, H., Self, J., North, C., **Chu, S.** and Quek, F. (2013). VisPorter: Facilitating Information Sharing for Collaborative Sensemaking on Multiple Displays. In *Journal of Personal and Ubiquitous Computing: Theme Issue on Designing Collaborative Interactive Spaces*, pp. 1-18. (IF: 2.40)
<https://link.springer.com/journal/779>

Book Chapters

- [C.1] **Chu, S.** and Quek, F. (2015). Beyond 'Apps' on Tablets: Making Sense of Learning within Technology Ecologies. *The Impact of Pen and Touch Technology on Education: Human-Computer Interaction Series*, pp. 173 - 192. Springer.
<http://www.springer.com/series/6033>

Workshop Proceedings

- [W.6] Quek, F. and **Chu, S.** (2017). Micro-Manufacture: At the Intersection of Making and Manufacturing. In *Proceedings of Workshop on Open Design at the Intersection of Making and Manufacture*. CHI 2017. Denver, CO: ACM.
- [W.5] **Chu, S.** and Quek, F. (2013). An Enactment-Based Approach to Creativity Support. In *Proceedings of Workshop on Interactive Technologies that Enhance Children's Creativity at Interaction Design & Children '13*. New York City: NY. June 24.
- [W.4] **Chu, S.** and Quek, F. (2013). MAIA: A Methodology for Assessing Imagination in Action. Presented at the *CHI 2013 Workshop on Evaluation Methods for Creativity Support Environments*, Paris, France: ACM.
- [W.3] Quek, F. and **Chu, S.** Thinking with objectified digital entities. In *Proceedings of CHI 2012 Workshop on Digital materiality*. Austin, TX: ACM.
- [W.2] Sawyer, B., Quek, F., Wong, W., Motani, M., **Chu Yew Yee, S.** and Perez-Quinones, M., Martin, T., Burbey, T. and McNair, L. "Information Re-finding Through Physical-Social Contexts". *Workshop on Personal Information Management (PIM) 2012 at ACM Conference for Computer Supported Collaborative Work (CSCW)*.
- [W.1] **Chu Yew Yee, S. L.**, Duh, H. B. L., Billinghamurst, M., Quek, F. and Chen, V. H. H. Current progress in interaction design for seniors. *CHI 2010 Workshop on Senior-friendly technologies: Interaction design for the elderly*.

Peer-Reviewed Paper Abstracts/Posters

- [R.9] Berman, A., Deurmeyer, E., Nam, B., **Chu, S. L.** and Quek, F. (2018). Exploring the 3D Printing Process for Young Children in Curriculum-Aligned Making in the Classroom. In *Proceedings of the Interaction Design & Children (IDC '18)*. Trondheim, Norway.
- [R.8] **Chu, S. L.**, Garcia, B., and Nam, B. (2018). Toward the Design of Scaffolds for In-the-World Situated Science Reflections through Wearables. In *Proceedings of the International Conference of the Learning Sciences (ICLS '18)*. London.
- [R.7] **Chu, S. L.** (2016). Technology-based Making as a Medium for Children's Development. Presented at the *Special Topic Meeting of the Society for Research in Children's Development (SRCD): Technology and Media in Children's Development*. October 27-30. University of California, Irvine, CA.
- [R.6] Bhangaonkar, S., **Chu, S. L.** and Quek, F. (2016). Thinking in Stories: Narrative-based Design for Higher-Level Thinking. In *Proceedings of the International Conference on Human Factors in Computing systems (CHI EA '16) Late-Breaking Work*. San Diego, CA. ACM.
- [R.5] Saenz, M., Strunk, J., **Chu, S. L.** and Seo, H. (2015). Touch Wire: Interactive Tangible Electricity Game For Kids. In *Proceedings of the 9th International Conference on Tangible, Embedded and Embodied Interaction*

(TEI '15) *Work-in-Progress*. Stanford University, CA. ACM.

- [R.4] **Chu, S.** (2013). Nurturing Children's Creative Practice in Storytelling through Micro-Enactments. *Doctoral Consortium at INTERACT '13*. Cape Town: South Africa.
- [R.3] **Chu, S.** (2013). Nurturing Children's Creative Practice in Storytelling through Micro-Enactments. *Graduate Student Symposium at Creativity & Cognition '13*. Sydney: Australia.
- [R.2] **Chu, S.** (2013). Nurturing Children's Creative Practice through Micro-Enactments. In *Proceedings of the Conference on Human Factors in Computing System EA, (CHI Doctoral Consortium)*. Paris, France: ACM.
- [R.1] **Chu Yew Yee, S. L.,** Gu, Y. X., Duh, H. B. L. (2010). A Narrative Approach for Game Design with Children. *IEEE Learning Technology Newsletter (Special Issue on Game-Based Learning)*, 12(1).
http://lttf.ieee.org/issues/january2010/index.htm#_Toc253225019

Invited Presentations

- [S.9] **Chu, S. L.** (2018). Wearables for Learning: Examining the Smartwatch as a Tool for Situated Science Reflection. Presented at *Division of Learning Sciences Seminar Series. Department of Educational Psychology, Texas A&M University*. College Station, TX. January 22nd.
- [S.8] **Chu, S. L.** and Quek, F. (2016). Integrating Making into the Elementary School Classroom: A Pathway to STEM. Keynote Presentation. Presented at *Learning and Teaching Expo 2016, Hong Kong Convention and Exhibition Centre*. Hong Kong. December 8th, 2016.
- [S.7] **Chu, S. L.** and Quek, F. (2016). Integrating Making in the Elementary Schools: Overview, Insights, and Lessons Learnt. Presented at *Event on Teaching through Making, San Antonio Museum of Science and Technology*. San Antonio, TX. August 20, 2016.
- [S.6] **Chu, S.** (2015). Stories We Live In: Understanding our Storied Self through Technology Design. Presented at *Cognoscenti, Department of Psychology, Texas A&M University*. College Station, TX. October 12th.
- [S.5] **Chu, S.** (2015). Stories We Live In: Narratives, Embodiment and Technology. Presented at the *Department of Human-Centered Computing, School of Informatics and Computing, Indiana University*. Indianapolis, IN. March 30th.
- [S.4] **Chu, S.** (2015). Stories We Live In: Narratives, Embodiment and Technology. Presented at the *Wisconsin Institute for Discovery, University of Wisconsin-Madison*. Madison, WI. March 19th.
- [S.3] **Chu, S.** (2015). Stories We Live In: Narratives, Embodiment and Technology. Presented at the *School of Arts, Technology & Emerging Communication, University of Texas at Dallas*. Richardson, TX. March 11th.
- [S.2] **Chu, S.** and Quek, F. (2014). Beyond 'Apps' on Tablets: Making Sense of Learning within Technology Ecologies. Presented at the *8th Workshop on the Impact of Pen and Touch Technology on Education (WIPTTE '14)*. College Station, TX.
- [S.1] **Chu, S.** (2012). Investigating the Physicality of Tangible Objects for Creativity Support of Children in Digital Storytelling. Presented at the *HCI Seminar Series at the Center for Human-Computer Interaction (CHCI) at Virginia Tech*. Blacksburg, VA.

Demos

- [D.2] Saenz, M., Strunk, J., **Chu, S. L.** and Seo, H. (2015). Touch Wire: Interactive Tangible Electricity Game for Kids. *Demo presented at the 9th International Conference on Tangible, Embedded and Embodied Interaction (TEI '15)*. Stanford University, CA. ACM.
- [D.1] Quek, F., Miller, C., Joshi, A., Verdie, Y., Ehrich, R., Evans, M., **Chu Yew Yee, S.** and Chakraborty, P. (2010). TanTab, The Tangram Tabletop System. *Finalist showcase presented at the SIGGRAPH 2010 Disney Research Learning Challenge*. Los Angeles.

THESES/DISSERTATIONS

Chu Yew Yee, S. L. (2015). Performative Authoring: Nurturing Children's Creativity and Creative Self-Efficacy through Digitally-Augmented Enactment-Based Storytelling. *Doctoral Dissertation, Department of Architecture, Texas A&M University*. College Station, TX.

Chu Yew Yee, S. L. (2013). An Evaluation Method for Thinking in Technology Ecologies. *MS Thesis, Department of Computer Science & Applications, Virginia Tech*. Blacksburg, VA.

Chu Yew Yee, S. L. (2009). Investigating fun and learning in serious games using the repertory grid technique. *Bachelor Honors Thesis, Department of Communications & New Media, National University of Singapore*. Singapore, Singapore.

PATENTS

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| Kodak Research Labs Rochester, NY | Determining an Interest Level for an Image Cross-Applications: Modifying Digital Images to Increase Interest Level; Method for Presenting High-Interest-Level Images; System for Presenting High-Interest-Level Images; System for Modifying Images to Increase Interestingness (Serial No. 13/537,099) Fedorovskaya, E., Snyder, J., Kurtz, A., Chu Yew Yee, S. and Shepter, G. | 2012 |
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HONORS & AWARDS

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| Best Paper Award | Understanding Storytelling as a Design Framework for Cognitive Support Technologies for Older Adults. International Symposium on Interactive Technologies for Ageing Populations (IxAP). | 2016 |
| Best Paper Award | <i>Performative Authoring: Nurturing Storytelling in Children through Imaginative Enactment</i> , Chu, S., Quek, F. and Tanenbaum, J. International Conference on Interactive Digital Storytelling (ICIDS). | 2013 |
| Honorable Mention for Best Paper | <i>Investigating Narrative in Mobile Games for Seniors</i> , Chu Yew Yee, S. L., Duh, H. B. L. and Quek, F. ACM Conference on Human Factors in Computing Systems (CHI). | 2010 |

MEDIA COVERAGE

| | | |
|---|-------------------------------------|--|
| ArchOne | (September 30 th , 2014) | <i>Study eyes influence of STEM activities on children for underrepresented groups</i> https://one.arch.tamu.edu/news/2014/9/30/stem-projects-quek-led/ |
| The Battalion | (October 22 nd , 2014) | <i>New technologies raise awareness in STEM careers</i> http://www.thebatt.com/news/new-technologies-raise-awareness-in-stem-careers/article_12431a47-18d6-5c9f-820b-6d1b54b6326f.html |
| The Eagle | (January 15 th , 2016) | <i>Educators look to spur students' interest in STEM programs</i> http://www.theeagle.com/news/local/educators-look-to-spur-students-interest-in-stem-programs/article_0f9385bf-f461-54b5-8f2a-aec7250452ac.html |
| ASEE First Bell | (January 19 th , 2016) | <i>NSF Funds STEM Program That Pairs University Professors With Elementary School Students</i> http://mailview.bulletinmedia.com/mailview.aspx?m=2016011901asee&r=3018256-af31&render=y |
| Texas A&M Today | (March 11 th , 2016) | <i>Kids explore science with Viz prof</i> https://today.tamu.edu/2016/03/11/kids-explore-science-with-viz-prof/ |
| KBTX news | (April 21 st , 2016) | <i>Bryan students engage with Texas A&M for hands-on learning</i> http://www.kbtx.com/content/news/Bryan-students-engage-with-Texas-AM-for-hands-on-learning-376648551.html |
| Immersive Learning Research network (iLRN) podcast | (May 1 st , 2017) | <i>Versatilist with Sharon Lynn Chu</i> https://www.podomatic.com/podcasts/versatilist/episodes/2017-05-01T21_56_00-07_00 |
| ArchOne | (December 7 th , 2016) | <i>Visualization profs heading STEM study in two colonias schools</i> http://viz.arch.tamu.edu/about/news/2016/12/7/quek-colonias-study/ |
| ArchOne | (June 19 th , 2017) | <i>Teacher 'making' workshop aids study, promotes STEM education</i> http://one.arch.tamu.edu/news/2017/6/19/workshop-study-promotes-stem-education/ |
| The Eagle | (December 14 th , 2017) | <i>Making the Makers: Pilot program, developed by A&M, gives kids at Neal Elementary tools to pursue STEM</i> http://www.theeagle.com/news/local/making-the-makers-pilot-program-developed-by-a-m-gives/article_9eee1d49-4ad7-5da4-a851-4b5aec5e23c8.html |

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| ArchOne | (December 8 th , 2017) | <i>Play-based learning earns NSF grant for visualization prof</i> https://one.arch.tamu.edu/news/2016/9/30/viz-profs-project-determine-if-storytelling-aids-science-learning/ |
| National Science Teachers Association (NSTA) | (February 2018) | <i>Science Teachers' Grab Bag</i> http://static.nsta.org/pdfs/nstareports/nstareports201802.pdf |

RESEARCH POSITIONS

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| Lab Director <i>Texas A&M University, College Station, TX</i> | The StoryLab@Texas A&M , www.thestorylab.arch.tamu.edu Direct the research lab; Mentoring of undergraduate and graduate students in research projects and theses, and publication guidance; Grant proposal writing. | 2015 – Present |
| Research Assistant <i>Texas A&M University, College Station, TX</i> | TAMU Embodied Interaction Lab (TEILab) , www.teilab.tamu.edu Assist in grant writing; Management of research projects; Mentoring of graduate students in HCI; Conduct research on creativity in children, reading support for the blind, and the integration of Making activities (basic electronics) into elementary school curriculum to promote STEM engagement and self-identity. | 2013 – 2014 |
| Graduate Assistant <i>Virginia Tech Blacksburg, VA</i> | Institute of Creativity, Arts & Technology (ICAT) , www.icat.vt.edu Conducted research on creative processes with children, and helping with activities that align with ICAT's goal of integrating engineering, the arts, science and design. | 2012 – 2013 |
| Research Assistant <i>Virginia Tech, Blacksburg, VA</i> | Vision Interfaces and Systems Lab (VISLab) Designed user studies for a research project studying the experience of students handling information in a digital ecology of touch devices, from <i>ipod Touch</i> and <i>iPads</i> to large touch screens. | 2011 –2012 |
| Research Intern <i>Kodak Research Labs Rochester, NY</i> | Computational Science and Technology Lab , http://www.kodak.com/ek/US/en/About_Kodak_Top/Science_Technology/Computational_Science.htm Worked on a research project, from conceptualization to data analysis, investigating the effects of familiarity and experience on the perceived interestingness of photos. | 2011 |
| Research Assistant <i>Interactive and Digital Media Institute, Singapore</i> | NUS-KEIO CUTE Center/ Mixed Reality Lab , http://www.cutecenter.org Designed and conducted experiments and user studies for multiple research projects on interaction design for seniors, microblogging, educational game design for children, mobile augmented reality. Carried out qualitative and quantitative data collection, coding and analysis. Wrote paper publications and reports. Organized a workshop at CHI 2010. Managed interdisciplinary teams of programmers, designers/artists and researchers. Advised final year undergraduate students. | 2009 – 2010 |

TEACHING

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| <p>Assistant Professor Texas A&M University, College Station, TX</p> | <p>Department of Visualization, www.viz.tamu.edu</p> <ul style="list-style-type: none"> • VIST 489-500 Understanding Interaction Design: Mixed senior undergraduate/graduate class (Fall 2015) • VIST 206 Vertical Studio Graphic/UX track: Undergraduate class from sophomores to seniors (Spring 2016) • VIZA 658 Interactive Storytelling: Mixed undergraduate/graduate class (Fall 2016) • VIZA 658 Interactivity + Storytelling: Mixed undergraduate/graduate class (Fall 2017) • CARC 602 Research Methods: College-wide graduate research methods class (Spring 2018) | <p>2015 – Present</p> |
| <p>Lecturer Texas A&M University, College Station, TX</p> | <p>Department of Visualization, www.viz.tamu.edu</p> <ul style="list-style-type: none"> • VIST 489-500 Introduction to Interaction Design: Mixed senior undergraduate/graduate class (Spring 2015) • VIST 489/VIZA 689 Embodied Interaction: Mixed senior undergraduate/graduate class (Fall 2014) | <p>2014 – 2015</p> |
| <p>Invited Speaker Texas A&M University, College Station, TX</p> | <p>Soft Interaction Lab, http://softinteraction.com/</p> <p>Gave a 3-part seminar series on ‘An introduction to HCI’, ‘A methodology for HCI research’, and ‘Research methods in HCI’, that was open to all students and faculty.</p> | <p>2014</p> |
| <p>Graduate Teaching Assistant Virginia Tech, Blacksburg, VA</p> | <p>Department of Computer Science, www.cs.vt.edu</p> <p>Managed and coordinated ‘Professionalism in Computing’ course. Coordinated assessments, structure course and evaluate students’ performance on presentations and essays.</p> | <p>2010 –2011</p> |

STUDENT SUPERVISION & MENTORING

GRADUATE STUDENTS

Current Thesis/Dissertation Chair:

- Beth Nam (PhD student, Architecture/Visualization, Texas A&M University)
- Brittany Garcia (PhD student, Architecture/Visualization, Texas A&M University)
- Zhenya Kolpakova (MSc student, Visualization, Texas A&M University)
- Xianmin Feng (MSc student, Visualization, Texas A&M University)
- Kelly Robert (MSc student, Visualization, Texas A&M University)
- Hannah Park (MSc student, Visualization, Texas A&M University)
- Lexi Mitchell (MSc student, Visualization, Texas A&M University)
- Nishant Bharna (MSc student, Computer Science, Texas A&M University)

Current Thesis/Dissertation Committee Member:

- Alexander Berman (PhD student, Computer Science, Texas A&M University)
- Niloofar Zarei (PhD student, Computer Science, Texas A&M University)
- Osazuwa Okundaye (PhD student, Architecture, Texas A&M University)
- Feiyu Yu (MSc student, Computer Science, Texas A&M University)

Graduate Students Graduated

- Kate Sackreiter (MSc, Texas A&M University)
- Eva Hengtaweesub (MSc, Texas A&M University)
- Kumar Sridharamurthy (MSc, Texas A&M University – Now Software Engineer at Schlumberger)
- Sourabh Bhangaonkar (MSc, Texas A&M University – Now Senior Consultant at Sogeti, USA)

UNDERGRADUATE STUDENTS

Current Undergraduate Students:

- Sarah Brown (BSc in Visualization, Texas A&M University)
- Brittnie Spornhauer (BA in Communication, Texas A&M University)
- Leah Kappayil (BA in Communication, Texas A&M University)

Past Undergraduate Students Mentored:

- Michael Saenz** (BSc, Texas A&M University – Now MSc student at Purdue University)
- Joshua Strunk** (BSc, Texas A&M University – Now Software Engineer at Flying Cars gaming company)
- Brittany Garcia** (BSc in Psychology – Now Research Assistant in the StoryLab, Texas A&M)
- Taylor Quance** (BSc in Psychology – Now MSc student in the Applied Cognition and Neuroscience program, UT Dallas)
- Agustin Morales** (BSc in Computer Science, Texas A&M University – Now Software Developer at General Motors)
- Kristin Freeman** (BSc in Psychology, Texas A&M University)
- Humaam Daas** (BSc in Political Science, Texas A&M University)
- Stephen Spencer** (BSc in University Studies, Architecture – Now applying for graduate school)
- Colin Banigan** (BSc student in Computer Science, Texas A&M University)
- Momore Adesanmi** (BSc student in Materials Engineering, Texas A&M University)
- Elva Trevino** (BA in Bilingual Education, Texas A&M University)

PROFESSIONAL SERVICE

- Co-Director** TAMU Initiative on Learning + Technology
- Faculty Advisor** TAMU ACM SIGCHI Student Chapter
- Chair** Interaction Design and Children (IDC) 2018 conference works-in-progress chair
Interaction Design and Children (IDC) 2017 conference workshop chair
- Program Committee** FabLearn (Fabrication in Learning) Europe Conference 2018
International Workshop on Interactive and Spatial Computing (IWISC 2018)
IARIA Advances in Computer-Human Interactions (ACHI)
HUCAPP International Conference on Human Computer Interaction Theory and Applications program
- Proposal Reviewer** National Science Foundation
- Conference Paper Reviewer** ACM International Conference on Interactive Digital Storytelling (ICIDS); ACM Designing Interactive Systems (DIS); ACM Symposium on Spatial User Interaction (SUI); ACM International Conference on Human Factors in Computing Systems (CHI); ACM International Conference on Computer Supported Collaborative Work (CSCW); IARIA Advances in Computer-Human Interactions (ACHI); ACM Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI) ; International Symposium on Mixed and Augmented Reality (ISMAR) ; ACM Creativity and Cognition (C&C); International Conference on Fabrication in Learning (FabLearn); IEEE Virtual Reality (VR); ACM Conference on Computer-Suported Collaborative Work (CSCW); ACM Designing Interactive Systems (DIS)
- Journal Article Reviewer** International Journal of Child-Computer Interaction
Entertainment Computing Journal
International Journal of Human-Computer Interaction
Computers & Education Journal
Journal of Communication
IEEE Transactions on Visualization and Computer Graphics
- Workshop Organizer** CHI 2010 Workshop on Senior-Friendly Technologies: Interaction Design for Seniors
- Others** Created the HCI@Viz group
Created the HCI Seminar Series in the Department of Visualization

OUTREACH

- Organizer** Workshop for elementary school teachers on science curriculum design through Making **Summer 2015; Summer 2016; Spring 2017; Summer 2017**

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| Co-Organizer | Hands-on workshop for pre-service and in-service school teachers on Making and science learning through Making | Summer 2017 |
| Organizer | Open house for students and parents of Neal Elementary School at Neal Elementary | January 2016 |
| Organizer | Public open house for students of Neal Elementary School at Texas A&M University | April 2016 |
| Organizer | Visit to Texas A&M for high school students from the Colonias | March 2017 |
| Organizer | Visit to Texas A&M for high school students from the Colonias | November 2017 |
| Organizer | Visit of Texas School Board of Education members to Texas A&M | Fall 2017 |

OTHER WORK EXPERIENCE

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| Summer Intern, <i>Massachusetts Institute of Technology, Cambridge, MA</i> | Singapore-MIT Gambit Game Lab, http://gambit.mit.edu/loadgame/gumbeat.php Acted as Producer/Scrummaster. Led a team of programmers, artists and tester to produce a persuasive casual game centered on research themes of integrating complex ideas and simple gameplay. Scheduled entire game development process from concept to testing using the Scrum methodology. Delegated tasks and maintained project vision. Liaised with product owners, sound team and external parties. Presented at press conferences. | 2008 |
| Project Intern, <i>Singapore</i> | M2B Game World Ltd., http://www.playnetearth.com/ Conducted market analysis through surveying of the online games market. Revamped company's blog. Conceived proposals for the company's rebranding. Developed company's sales kit. Assisted in development of company's new website. | 2007 |