6300 Ocean Drive, Unit 5824
Corpus Christi, Tx 78412

☎ (361) 825-5877

⋈ Scott.King@TAMUCC.edu

R⁶ Scott_King8

⑤ 0000-0002-4022-0388

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July 22, 2021

Scott A. King

Education

2001 **Doctor of Philosophy**, Ohio State University, Computer & Information Science. 1994 Master of Science, Ohio State University, Computer & Information Science. 1988 Bachelor of Science, Utah State University, Computer Science. Academic and Research Positions Texas A&M University-Corpus Christi 2020-present Professor. 2018-present Director, Innovation in Computing REsearch Labs (iCORE). 2015–2020 Chair, Department of Computing Sciences. 2014–2019 **Program Coordinator**, Geospatial Computer Science Doctoral Program. 2013–2015 **Program Coordinator**, Computer Science (BS and MS). 2009–2015 **Program Coordinator**, Computer Science MS Program. 2007–2020 Associate Professor. 2004–2007 Assistant Professor. NASA 2006 Summer Faculty Fellow, Johnson Space Center, Houston, Texas. University of Otago, Otago, New Zealand 2002-2004 Lecturer (equivalent to US assistant professor), Computer Science. The Ohio State University 2001 Sr Lecturer, Department of Computer & Information Science. 2000–2001 Lecturer, Department of Computer & Information Science. 1996–2000 Graduate Research Assistant, Computer & Information Science. 1992–2000 Graduate Administrative Assistant, Computer & Information Science. 1995–1996 Graduate Research Assistant, Ohio Supercomputer Center.

Industry Positions

- 1995–1997 Summer Intern, Texas Instruments Software Research Laboratory, Dallas, TX.
- 1991–2, 1994 **Programmer/Analyst**, Harris Methodist, Ft Worth, TX.

- 1989–1991 Software Engineer, General Dynamics, Ft Worth, TX.
- 1988–1989 **Programmer**, Tandy Corp, Ft Worth, TX.

Grants

Federal

- PI \$568,772, NSF #2040493, "AGEP 2022 National Research Conference", May 1, active 2021–Apr 30, 2023.
- Co-PI **\$2,579,356 (TAMUCC Subaward), \$20M (Total)**, NSF #2019758, "AI Instiactive tute: Artificial Intelligence for Environmental Sciences (AI2ES)", Amy McGovern, Oklahoma University (overall PI), Philippe Tissot subaward PI, Sep 1, 2020–Aug 31, 2025.
- PI \$315,431 (TAMUCC Subaward), \$3,665,604 (Total), NSF #1834620, "NSF active INCLUDES Alliance: Computing Alliance of Hispanic-Serving Institutions", Ann Gates, UTEP (PI), Sep 1, 2018–Aug 31, 2023.
- Co-PI \$517,657, NSF #1828380, "MRI: Acquisition of Cloud Computing Infrastructure active for Science and Engineering Research Innovations", with Ajay Katangur (PI), Dulal Kar, Jinha Jung, Michael J. Starek., Sep 1, 2018–Aug, 31, 2021.
- PI \$614,061, NSF #1723165, "Collaborative Research: The Texas A&M System active AGEP Alliance: A Model to Advance Historically Underrepresented Minorities in the STEM Professoriate", with Richard Coffin and Mehrube Mehrubeoglu. Alliance with TAMU, PVAMU, TAMUK Alliance Total: \$3,231,681, Sep 1, 2017–Aug, 31, 2022.
- Co-PI \$188,569 (TAMUCC Subaward), \$3,995,406 (Total), NSF #1551221, active "BPC-A: Computing Alliance of Hispanic-Serving Institutions-Building a Resilient, Sustainable, and Adaptable CAHSI Ecosystem", Ann Gates, UTEP (PI); Computing Alliance of Hispanic-Serving Institutions (CAHSI) which includes: California State University-Dominguez Hills, California State University-San Marcos, Dade College, Florida International University, New Mexico State University, Texas A&M University-Corpus Christi, University of Houston Downtown, University of Puerto Rico Mayaguez, the University of Texas El Paso, and the University of Texas Pan American, Oct 1, 2016—September 30, 2021.
- Co-PI \$609,857, NSF #1458096, "Supporting Undergraduates for Careers in Computing active and Engineering with Scholarships and Supervision", with Dulal Kar (PI) and Dugan Um, Mar 1, 2015–Aug, 31, 2020.
- Team \$44,395 (support for my activities), \$2,104,412. (Total), NASA Unmanned Partner Aircraft Systems (UAS) Traffic Management (UTM) Project Technical Capabilities Level (TCL) 4 Test activities, contract #NND15SA85B, "Technical Capability Level 4 (TCL4) Demonstration", Mike Sanders LSUAS (PI), Feb 13, 2019 Sep 30, 2019.

- PI \$597,290, NSF #1153961, "Expanding the STEM Pool with Transfer Scholarships", with John Fernandez (original PI), Mehrube Mehrubeoglu, Patricia Hill, AJeannie Gage, and Krystal Escobar., May 15, 2012–Apr 30, 2017 (extended to April 20, 2018).
- PI \$599,599, NSF #0806780, "Attacking the Gathering Storm in Computer Sciences and Mathematics (STORM)", with John Fernandez (original PI) Jose H. Giraldo, Patricia G. Hill, Jeannie T. Gage, Krystal Escobar, Sep 1, 2008–Aug 31, 2015.
- Co-PI \$650,000, NSF #0708573, "CRI: IAD Computing Infrastructure for Research-Based Learning (CIRBL)", with John Fernandez (PI), Mario Garcia, Dulal Kar, and Long-zhuang Li, 1 Sep 2007–31 Aug 2010.
- Co-PI \$1,349,999, NSF #EIA-0330822, "MII: Improving the Pipeline in Applied Computer Science", with John Fernandez (PI), Carl Steidley, R. Stephen Dannelly, Rafic Bachnak, Mario Garcia, Dulal Kar, Mehrube Mehrubeoglu, Jim Nystrom (Former Co-Principal Investigator), Sep 1, 2003–Aug 31, 2008.
 - PI \$100,000, NASA #NNJ06HH41G, "Quantifying Digital Imagery and Position Tracking for Non-Destructive Evaluation Tools for Use on Space Station Structure", with Rafic Bachak, Sep 1, 2006–Aug 31 2008.

New Zealand Federal

Co-PI **\$3000NZ subgrant**, New Zealand Foundation for Research, Science and Technology, New Economy Research Fund AUT-X0201, "Connectionist-Based Intelligent Information Systems", N. Kasabox (PI), total grant, \$360,000 p.a., 2003.

Industrial

- Co-PI \$100,000, Amazon, "Real Time Heterogeneous Product Counting on Amazon Bin Image Dataset based on Deep Learning" with Maryam Rahnemmonfar (PI), January 1, 2017- Dec, 31, 2017.
 - PI \$1950, ATI research, Equipment grant, Dec. 2004.
 - PI \$3000, nVIDIA, Equipment grant, June, 2003.
- Co-PI **\$24,000**, Texas Instruments, "Visual Communications", with Richard Parent (PI), Sep 1, 1997–Aug 31, 1998.
- Co-PI **\$25,000**, Texas Instruments, "Visual Communications", with Richard Parent (PI), Sep 1, 1996–Aug 31, 1997.

State and Local Government

- Co-PI \$217,840, City of Corpus Christi, "COVID 19: Coastal Bend Joint COVID-19
 active Taskforce Operation and Funding", Philippe tissot (PI), May 15, 2020—Jan 15, 2021.
 - PI \$43,240, Texas Workforce Commission #2208WSW003, "Summer Merit Program", Apr 15, 2008–Sep 30, 2008.

PI \$82,200, Texas Workforce Commission, Texas Youth in Technology Grant Program, Texas Workforce Commission and Texas Engineering and Technical Consortium # 2208WSW001, "Initiatives to Increase Participation in Computer Science and Engineering", Jan 1, 2008–Aug 31, 2009.

Institutional

- PI \$718, University Research Enhancement Grant, "Fall Detection Using Indoor Localization and Acceleration Sensors", with Leana Bouse (Co-PI), Sep 2019 August 2020.
- Co-PI **\$2,500**, *TEES*, "Multi Agent Precision Agriculture Monitoring,", with Jung, Jinha (PI), Cui, Suxia, Halcomb, Jonda, DaSilva, Dilma, June 2017 August 2018.
- Co-PI **\$2,750**, University Research Enhancement Grant, with Ajisafe, Toyin D (PI), 2015 2016.
- Co-PI **\$5,000**, College of Education Faculty Research Enhancement Grant, with Ajisafe, Toyin D(PI), 2015 2016.
- Co-PI **\$28,675**, Texas Research Development Fund, "Development of New Models of the Local Geoid along the Coast of the Gulf of Mexico", Sep 1, 2008 Aug 31, 2009.
 - PI \$35,425, TAMUCC Texas Research Development Funds, "Visualization and Modeling of the Environmental Phenomena in Bays and Estuaries", 1 Nov 2007 31 Aug 2008.
 - PI \$28000, TAMUCC HEAF Funds, "Upgrade for graphics Lab", 2007.
 - PI \$40,400, TAMUCC Texas Excellence Fund, "Modeling, Simulation, and Visualization of the Environmental Phenomena in the Bays and Estuaries of the Gulf of Mexico", with Alex Sadovski, Oct 2007 31 Aug 2008.
 - PI \$35,200, TAMUCC Texas Research Development Funds, "Visual Prosody for Improved Facial Animation", 1 Sep 2006 31 Aug 2007.
 - PI \$11,190, TAMUCC University Research Enhancement Program,, "Motion Capture of Prosodic Information for Speech Synchronization", 1 Sep 2005 31 Aug 2006.
 - PI \$16,057, TAMUCC Texas Excellence Fund, "Creating a Conversational Agent for Better Human Computer Interaction", 1 Feb 2005 31 Aug 2005.
 - PI **\$4000**, TAMUCC Texas Excellence Fund, "Facial Animation", 1 Feb 2005 31 Aug 2005.
 - PI **\$1000NZ**, University of Otago, Dept of Computer Science, Travel grant to attend IVCNZ '03, 2003.
 - PI \$3500NZ, University of Otago, Travel grant to attend SIGGRAPH 2003, 2003.
 - PI **\$3000NZ**, University of Otago, Computer Science Dept, Travel grant to attend CA 2002, 2002.
 - PI \$3500NZ, University of Otago, Travel grant to attend SIGGRAPH 2002, 2002.

Publications (Students denoted with *)

Peer-Reviewed Journal Articles

- [1] Laha Ale*, Ning Zhang, Scott A. King, and Jose Guardiola. Spatio-temporal bayesian learning for mobile edge computing resource planning in smart cities. *ACM Trans. Internet Technol.*, 21(3), June 2021.
- [2] Siyamack Sharafi, Hamid Kamangir, Scott A King, and Reza Safaierad. Effects of extreme floods on fluvial changes: the khorramabad river as case study (western iran). Arabian Journal of Geosciences, 14(12):1–11, 2021.
- [3] Hamid Kamangir, Waylon Collins, Philippe Tissot, Scott A. King, **Hue Thi Hong Dinh***, Niall Durham, and James Rizzo. Fognet: A multiscale 3d cnn with double-branch dense block and attention mechanism for fog prediction. *Machine Learning with Applications*, 5:100038, 2021.
- [4] **Juan Martinez***, José Baca, and Scott A. King. Towards predicting sensorimotor disorders in older adults via bayesian probabilistic theory and mixed reality. *SN Applied Sciences*, 2(1):1–11, 2020.
- [5] I. Alihan Hadimlioglu*, Scott A. King, and Michael J Starek. Floodsim: Flood simulation and visualization framework using position-based fluids. ISPRS International Journal of Geo-Information, 9(3):163, 2020.
- [6] **Hamid Kamangir***, Waylon Collins, Philippe Tissot, and Scott A King. Deep-learning model used to predict thunderstorms within 400 km2 south texas domains. *Meteorological Applications*, 27(2), 2020.
- [7] **Dat Do***, Scott A. King, Alaa Sheta, and **Thanh Pham***. An integrated ambient intelligence system for a smart lab environment. *Int. J. Computational Science and Engineering*, 21(2):289–297, 2020.
- [8] Fatemeh Noori, Hamid Kamangir, Scott A. King, Alaa Sheta, **Mohammad Pashaei***, and Abbas SheikhMohammadZadeh. A deep learning approach to urban street functionality prediction based on centrality measures and stacked denoising autoencoder. *ISPRS International Journal of Geo-Information*, 9(7), 2020
- [9] José Baca, **Juan Martinez***, and Scott King. Assessing Sensorimotor Problems via Bayesian Theory and Hidden Markov Models. *Journal of Engineering and Science in Medical Diagnostics and Therapy*, 3(2), 2020.
- [10] I. Alihan Hadimlioglu* and Scott A. King. Visualization of flooding using adaptive spatial resolution. ISPRS International Journal of Geo-Information, 8(5):204, 2019.
- [11] **I. Alihan Hadimlioglu*** and Scott A. King. City maker: Reconstruction of cities from openstreetmap data for environmental visualization and simulations. *ISPRS International Journal of Geo-Information*, 8(7):298, 2019.

- [12] **Evan Krell***, Alaa Sheta, **Arun Prassanth***, and Scott A. King. Collision-free autonomous robot navigation in unknown environments utilizing PSO for path planning. *Journal of Artificial Intelligence and Soft Computing Research*, 9(4):267 282, 2019.
- [13] **I. Alihan Hadimlioglu*** and Scott A King. Automated musical transitions through rule-based synthesis using musical properties. *Entertainment Computing*, 28:59 67, 2018.
- [14] Paul A Montagna, Alexey L Sadovski, Scott A King, Kevin K Nelson, Terence A Palmer, and Kenneth H Dunton. Modeling the effect of water level on the nucces delta marsh community. Wetlands Ecology and Management, 25(6):731–742, 2017.
- [15] Phyllis Tedford and Scott A King. Using a summer camp to attract computer science majors. *Journal of Computing Sciences in Colleges*, 24(4):97–103, 2009.
- [16] Rafic Bachnak and Scott A King. Position tracking and flaw visualization in conductive materials. WSEAS TRANSACTIONS on SYSTEMS, 7(9):804–813, 2008.
- [17] **Sperry, Rita A***, Scott A King, and John D Fernandez. Is a 3-d image necessary to determine eye gaze? *Journal of Computing Sciences in Colleges*, 22(4):198–204, 2007.
- [18] **Angelidis***, **Alexis***, Marie-Paule Cani, Geoff Wyvill, and Scott King. Swirling-sweepers: Constant-volume modeling. *Graphical Models*, 68(4):324–332, 2006.
- [19] Scott A King and Richard E Parent. Creating speech-synchronized animation. *IEEE Transactions on visualization and computer graphics*, 11(3):341–352, 2005.
- [20] Scott A King and Richard E Parent. Animating song. Computer Animation and Virtual Worlds, 15(1):53–61, 2004.
- [21] Scott A King and Richard E Parent. A 3d parametric tongue model for animated speech. Computer Animation and Virtual Worlds, 12(3):107–115, 2001.
 Peer-Reviewed Conference Proceedings (full papers)
- [22] Juan Martinez*, José Baca, Luis Rodolfo Garcia Carrillo, and Scott A. King. Overwatch-m system: Implementation of bayesian statistics for assessment of sensorimotor control. In Alexánder Martínez, Héctor A. Moreno, Isela G. Carrera, Alexandre Campos, and José Baca, editors, Advances in Automation and Robotics Research, pages 79–91, Cham, 2020. Springer International Publishing.
- [23] Gabriel Alexis Guijarro Reyes*, Juan Martinez*, Luis Rodolfo Garcia Carrillo, Ignacio Rubio Scola, José Baca, and Scott A. King. Deep neural network-inspired approach for human gesture-triggered action control applied to unmanned aircraft systems. In Alexander Martinez, Héctor A. Moreno, Isela G. Carrera,

- Alexandre Campos, and José Baca, editors, Advances in Automation and Robotics Research, pages 92–111, Cham, 2020. Springer International Publishing.
- [24] **Evan Krell***, Scott A. King, Luis Rodolfo Garcia Carrillo, and Joao P. Hespanha. Game theoretic potential field for autonomous water surface vehicle navigation using weather forecasts. In 2020 American Control Conference, pages 2112–2117. IEEE, 2020.
- [25] **Evan Krell***, Scott A. King, and Luis Rodolfo Garcia Carrillo. Autonomous water surface vehicle metaheuristic mission planning using self-generated goals and environmental forecasts. In 2020 American Control Conference (ACC), pages 2502–2507. IEEE, 2020.
- [26] **Thanh Van Pham***, Byung Cheol Lee, and Scott A. King. A comparison of effectiveness between 2-dimensional and 3-dimensional data visualization in detecting plant architectural characteristics. In Sakae Yamamoto and Hirohiko Mori, editors, *Human Interface and the Management of Information. Visual Information and Knowledge Management*, pages 223–236, Cham, 2019. Springer International Publishing.
- [27] Ogwo Ogwo*, Hamza Turabieh, Alaa Sheta, and Scott A. King. Medical data classification using binary brain storm optimization algorithm. In *Proceedings of AIRC* 2019, 2019.
- [28] **Mehmet Ozkan***, Luis Rodolfo Garcia Carrillo, and Scott A. King. Rescue boat path planning in flooded urban environments. In 2019 IEEE International Symposium on Measurement and Control in Robotics (ISMCR), pages B2–2–1–B2–2–9, Sep. 2019.
- [29] Toyin Ajisafe, **Rahul Bethi***, Scott A. King, and Ajay Katangur. Development and usability of a low-cost kinect game to promote movement competence in children with and without intellectual disability. In Xiaowen Fang, editor, *HCI in Games*, pages 245–264, Cham, 2019. Springer International Publishing.
- [30] **Zhao, Shuyi***, Scott King, and Dulal Kar. A tool for detection and analysis of a human face for aesthetical quality using mobile devices. In *Proceedings of the International Conference on Image Processing, Computer Vision, and Pattern Recognition (IPCV)*, pages 159–164, 2018.
- [31] Sai Vinay Teja Manikonda*, Alaa Sheta, Ajay K. Katangur, and Scott A. King. Metaheuristic search algorithms for oil spill detection using SAR images. In 2018 8th International Conference on Computer Science and Information Technology (CSIT), pages 143–149, 2018.
- [32] Karthikeyan U. Gunasekaran*, Evan Krell*, Alaa Sheta, and Scott A. King. Map generation and path planning for autonomous mobile robot in static environments using GA. In 2018 8th International Conference on Computer Science and Information Technology (CSIT), pages 91–96, 2018.

- [33] **Dang Huynh***, Scott A. King, and Ajay K. Katangur. A framework for cost-effective communication system for 3d data streaming and real-time 3d reconstruction. In *Proceedings of the 3rd International Workshop on Interactive and Spatial Computing*, IWISC '18, pages 88–96, New York, NY, USA, 2018. ACM.
- [34] Vinay D. Pinnaka*, Scott A. King, and Ajay K. Katangur. Slip: A cost-effective infrastructure for a smart environment. In 2017 IEEE International Symposium on Parallel and Distributed Processing with Applications and 2017 IEEE International Conference on Ubiquitous Computing and Communications, pages 1439–1443. IEEE, 2017. 26/75 accepted, 34.7%.
- [35] Dat Do*, Scott A. King, Alaa Sheta, and Jiaqi Hu*. Implementation of an integrated ambient intelligence system. In 2017 IEEE International Symposium on Parallel and Distributed Processing with Applications and 2017 IEEE International Conference on Ubiquitous Computing and Communications, pages 1410–1416. IEEE, 2017. Full paper 21/75 accepted, 28.0%.
- [36] M. Y. Teng*, R. Mehrubeoglu, S. A. King, K. Cammarata, and J. Simons. Investigation of epifauna coverage on seagrass blades using spatial and spectral analysis of hyperspectral images. In 5th Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing (WHISPERS), 2013.
- [37] Alexey L Sadovski, Paul A Montagna, and Scott King. Modeling of marshlands ecosystems: Roadmap to restoration of nueces delta marshes. In *Recent Advances in Fluid Mechanics, Heat & Mass Transfer and Biology*, pages 100–104. WSEAS, 2012.
- [38] Gaowei Chen*, Scott A King, and Michael Scherger. Robot remote control using bluetooth and a smartphone augmented system. In *Informatics in Control, Automation and Robotics*, pages 453–460, Berlin, Heidelberg, 2011. Springer. Acceptance rate: 25.8% 219/850.
- [39] **Anh Tuan Do*** and Scott A King. Creating emotional speech for conversational agents. In 2011 Workshop on Digital Media and Digital Content Management (DMDCM), pages 107–110. IEEE, May 2011. 70/181 accepted 38.6%.
- [40] Long K Huynh* and Scott A King. Low-cost solutions for making handsfree video games. In *IADIS International Conference Game and Entertainment Technologies 2011*, pages 51–58, 2010. full paper (11/56 accepted, 19.6%.
- [41] Scott A King. Animating speech in games. In *Proceeding of Motion in Games 2008* (MIG '08), pages 223–232, 2008.
- [42] Rafic Bachnak and Scott King. Non-destructive evaluation and position tracking of flaws in conductive materials. In *Proceedings WSEAS International Conference on SYSTEMS Mathematics and Computers in Science and Engineering*, number 12, pages 68–73. WSEAS, 2008.

- [43] Rafic Bachnak and Scott King. Non-destructive evaluation and flaw visualization using an eddy current probe. In *Systems*, 2008. ICONS 08. Third International Conference on, pages 134–139. IEEE, 2008. Acceptance rate: 27%, *best paper award*.
- [44] R Bachnak, S King, **W Maeger***, and T Nguyen. Eddy current system for material inspection and flaw visualization. In *Proceedings of the 6th conference on Applications of electrical engineering*, pages 28–33. World Scientific and Engineering Academy and Society (WSEAS), 2007.
- [45] **Zhuming Lam*** and Scott A King. Simulating tree growth based on internal and environmental factors. In *Proceedings of the 3rd international conference on Computer graphics and interactive techniques in Australasia and South East Asia*, pages 99–107. ACM, 2005. Acceptance rate: 41% 38/93.
- [46] **Jeremy Burgess***, Geoff Wyvill, and Scott A King. A system for real-time watercolour rendering. In *Computer Graphics International 2005*, pages 234–240. IEEE, 2005. Acceptence rate: 39/265.
- [47] **Jeremy Burgess*** and Scott A. King. A system for watercolour rendering. In *Proceedings of Image and Vision Computing New Zealand 2004*, pages 357–362, 2004.
- [48] **Andrew Wood***, Brendan McCane, and S King. Ray tracing arbitrary objects on the GPU. In *Proceedings of Image and Vision Computing New Zealand 2004*, pages 327–332, 2004.
- [49] Alexis Angelidis*, Marie-Paule Cani, Geoff Wyvill, and Scott King. Swirling-sweepers: Constant volume modeling. In *ACM SIGGRAPH 2004 Sketches*, SIG-GRAPH '04, page 40, New York, NY, USA, 2004. ACM.
- [50] A. Angelidis*, M. P. Cani, G. Wyvill, and S. King. Swirling-sweepers: constant-volume modeling. In 12th Pacific Conference on Computer Graphics and Applications, 2004. PG 2004. Proceedings., pages 10−15, Oct 2004. ★ best paper award*.
- [51] Scott A. King. 'real-time facial animation and speech synchronization techniques applicable to 3d games. In *Proceedings of New Zealand Game Developers Conference* 2004, pages 94–102, 2004.
- [52] **Zhuming Lam*** and Scott A King. Animation of tree development. In *Proceedings* of Image and Vision Computing New Zealand 2003, pages 297–302, 2003.
- [53] Will Baker* and Scott A. King. Interactive modelling of hair with texture maps. In *Proceedings of Image and Vision Computing New Zealand 2003*, pages 84–89, 2003.

- [54] Scott A King, Alistair Knott, and Brendan McCane. Language-driven nonverbal communication in a bilingual conversational agent. In *Computer Animation and Social Agents*, 2003. 16th International Conference on, pages 17–22. IEEE, 2003.
- [55] James D. Edge, Manuel Sánchez Lorezno, Scott A King, and Steve Maddock. Use and re-use of facial motion capture data. In *Proceedings of Vision*, Video, and Graphics, pages 135–142, 2003.
- [56] Rick Parent, Scott King, and Osamu Fujimura. Issues with lip sync animation: can you read my lips? In *Computer Animation*, 2002. Proceedings of, pages 3–10. IEEE, 2002.
- [57] Scott A King and Richard E Parent. Lip synchronization for song. In *Computer Animation*, 2002. Proceedings of, pages 233–239. IEEE, 2002. Acceptance rate: 31.3% 15/48.
- [58] Scott A King, Richard E Parent, and Barbara Olsafsky. An anatomically-based 3d parametric lip model to support facial animation and synchronized speech. In *Proc. Deform 2000*, pages 7–9, 2000.
- [59] Scott A. King and Richard E. Parent. A parametric tongue model for animated speech. In Nadia Magnenat-Thalmann, Daniel Thalmann, and Bruno Arnaldi, editors, Computer Animation and Simulation 2000, pages 3–13, Vienna, 2000. Springer Vienna.
- [60] Scott A King, Roger A Crawfis, and Wayland Reid. Fast animation of amorphous and gaseous phenomena. In *Proceedings of Volume Graphics '99*, pages 333–346, 1999.
- [61] Roni Yagel, Don Stredney, Gregory J Wiet, Petra Schmalbrock, Louis Rosenberg, Dennis J Sessanna, Yair Kurzion, and Scott King. Multisensory platform for surgical simulation. In Virtual Reality Annual International Symposium, 1996., Proceedings of the IEEE 1996, pages 72–78. IEEE, 1996.

Peer-Reviewed Book Chapters

- [62] Scott A King. Animating speech in games. In Arjan Egges, Arno Kamphuis, and Mark Overmars, editors, *Motion in Games*, pages 234–245. Springer, Berlin, Heidelberg, 2008.
- [63] Scott A King, Richard E Parent, and Barbara L Olsafsky. A muscle-based 3d parametric lip model for speech-synchronized facial animation. In *Deformable Avatars*, pages 12–23. Springer, 2001.
- [64] Scott A King, Roger A Crawfis, and Wayland Reid. Fast volume rendering and animation of amorphous phenomena. In *Volume Graphics*, pages 229–242. Springer, 2000.

Books - Editing (contributed)

[65] Scott A. King, editor. Proceedings: New Zealand Game Developers Conference: Fuse 2004: 26th-29 June, 2004, University of Otago, Dunedin, New Zealand. New Zealand Game Developers Conference, 2004.

Other Publications

- [66] Sarah Hug, Martine Ceberio, Diego Aguirre, Scott King, Megan Thomas, Eliana Valenzuela, Tom Carter, and Nayda Santiago. Reflecting on reflection: Integrating critical thinking into cs teaching and learning practice. In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*, pages 1365–1365, 2021.
- [67] Mohammad Pashaei, Hamid Kamangir, Michael J Starek, Philipe Tissot, and Scott A King. Suggesting an efficient deep learning architecture for coastal wetland land cover mapping with uas imagery. In 100th American Meteorological Society Annual Meeting. AMS, 2020.
- [68] Hamid Kamangir, Philippe E Tissot, Waylon G Collins, and Scott A King. A comparison of deep learning, shallow neural network, and principal component analysis based approaches to thunderstorm prediction. In 100th American Meteorological Society Annual Meeting. AMS, 2020.
- [69] Paul A. Montagna, Alex L. Sadovski, Scott King, Kevin C. Nelson, and Terrance Palmer. Nueces delta ecological modeling for nueces river and tributaries texas. final report to u.s. army corps of engineers for contract number: W9126g-09-t0076. Technical report, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University at Corpus Christi, Corpus Christi, Texas, 2012.
- [70] **Ortiz, Jonathan*** and Scott A. King. An interactive visualization tool to explore the geoid. *McNair Scholars Research Journal*, 2:105–109, 2010.
- [71] Scott Alan King. A facial model and animation techniques for animated speech. PhD thesis, The Ohio State University, 2001.
- [72] Scott A King and Richard E Parent. Talkinghead: A text-to-audiovisual-speech system. Technical report, Technical Report OSU-CISRC-2/80-TR05, Computer and Information Science, Ohio State University, 2000.

Patents

[73] Frank Z Brill III and Scott A King. Apparatus and method for transmitting graphical representations, August 20 2002.

Professional Development

2021 CVPR, June 19-25, 2021 ACUE Credential in Effective College Instruction, earned 5/18/2021 NVIDIA GTC²¹ April 12 - 23 , 2021

2021 ACM SIGCSE, The 52nd ACM Technical Symposium on Computer Science Education, March 13-20, 2021

100th American Meteorological Society Annual Meeting and 19th Conference on Artificial Intelligence for Environmental Science, Boston Massachusetts, January 12 - 16, 2020

2019 AGEP National Research Meeting, Diverse Pathways in STEM: Achieving the Dream, Coeur d'Alene, Idaho, May 19-21, 2019

ABET Annual Symposium, Dallas, TX, April 9-13, 2019.

Department Chair Professional Development, Corpus Christi Tx, Jan 9-10, 2019

Texas Mobility Summit, Arlington Tx, Oct 28-30, 2018

CRA Snowbird, July 2018

CAHSI All-Hands, Pasadena CA, July, 2018.

Google Problem Solving, July 2018, Austin.

TEES Annual Conference, College Station, TX, May 21-22 2018.

ABET Annual Symposium, San Diego, CA, April 10-13, 2018.

CAHSI Summit, Houston, TX, Jan 30-31 2018.

ABET IDEAL workshop, New Orleans, LA, January 8-11, 2018.

IUCC 2017, Guangzhou, China, December 12-15, 2017.

CS Education Summit, CMU School of Computer Science an NSF, Pittsburgh, PA, October 2-3, 2017.

2017 ABET Symposium, Baltimore, MD, April 20-23, 2017.

34th Academic Chairpersons Conference, New Orleans, LA, February 9-10, 2017.

Search And Rescue Training Exercise - Gibbons Creek WSAR, TX, January 27-28, 2017.

TEES Annual Conference, College Station, TX, May 27-28 2017.

Texas A&M University System 13th Annual Pathways Student Research Symposium, Prairie View, TX, Nov 3-4, 2016.

2016 CRA Conference, Snowbird, UT, July 17-19, 2016.

TEES Annual Meeting, College Station Jun 6-7, 2016

Texas A&M University System 12th Annual Pathways Student Research Symposium, Corpus Christi, TX, October 22 - 23, 2015.

ABET Site Visit preparation, TAMU-Texarkana, Oct 1-2 2015,

CAHSI Summit 2015, San Juan, Puerto Rico, September 9 - 13, 2015.

TAMU System Department Head Training, College Station, TX, July 27-28, 2015.

ABET Symposium, Atlanta, GA, April 22-25, 2015.

Fundamentals of Program Assessment Workshop, Atlanta, GA, April 22, 2015

National Academy of Engineering Regional Meeting, College Station, March 30-31, 2015.

ABET Institutional Representative Orientation, Baltimore, MD, July 9-11, 2014.

2014 SACNAS National Conference, Los Angeles, CA, October 16-18, 2014.

2013 SACNAS National Conference & Special 40th Anniversary Celebration, San Antonio, TX, October 3 - 6, 2013.

2013 ABET Symposium, Portland, OR, April 10- 14, 2013.

Game and Entertainment Technologies, Rome, Italy, July 22-24, 2011.

Computer Animation and Social Agents, Chengdu, China, May 26-28, 2011.

Motion in Games, Utrecht, The Netherlands, Jun 14-17, 2008.

Professional and Community Engagement

Curriculum Computer Science/Information Technology Field of Study Advisory (FOS) Commit-

tee - appointed by Texas Higher Education Coordinating Board, Aug 2018-present

CRA Snowbird, July 2018

CMU Summit on CS Education, October 2-3, 2017

CRA Snowbird, July 2016

Conference Computer Animation and Social Agents 2009

Committee Fuse (New Zealand Game Developer Conference) 2004

Technical Image and Vision Computing New Zealand 2020

Program Computer Animation and Social Agents 2020

Committee Image and Vision Computing New Zealand 2019

Computer Animation and Social Agents 2019

Image and Vision Computing New Zealand 2018

Computer Animation and Social Agents 2018

Image and Vision Computing New Zealand 2017

Computer Animation and Social Agents 2017

Image and Vision Computing New Zealand 2016

Computer Animation and Social Agents 2016

Motion in Games 2016

Image and Vision Computing New Zealand 2015

Computer Animation and Social Agents 2015

Ubiquitous Positioning, Indoor Navigation and Location-Based Services 2014

Image and Vision Computing New Zealand 2014

Computer Animation and Social Agents 2014

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Motion in Games 2011

Computer Animation and Social Agents 2011

Image and Vision Computing New Zealand 2010

Motion in Games 2010

Computer Animation and Social Agents 2010

Motion in Games 2009

Computer Graphics International 2009

Image and Vision Computing New Zealand 2009

Image and Vision Computing New Zealand 2008

Image and Vision Computing New Zealand 2007

Computer Animation and Social Agents 2007

Image and Vision Computing New Zealand 2006

Computer Animation and Social Agents 2006

Image and Vision Computing New Zealand 2005

Graphite 2005

Pacific Graphics 2004

Computer Animation and Social Agents 2004

Other SIGGRAPH International Committee, 2002–2003

Professional SIGGRAPH Pathfinders, 2001

Community Judge for Windsor Park Science Fair, Feb 7, 2008

Service Texas Skills USA, state finals judge for Animation and Visualization, mar 29-30, 2007

Weldon Smith Elementary Science Fair Judge, 2006

Chair, Volunteers for Medical Engineering of Texas, Programming and Communication Group, 1989-90

Presentations

Author & Pinnaka, V. D., King, S. A., Katangur, A. K., "SLIP: A Cost-effective infrastructure Presenter for a smart environment," IUCC 2017, IEEE, Guangzhou China. (December 2017).

> Do, A. T., King, S. A., "Creating Emotional Speech for Conversational Agents", The 24th International Conference on Computer Animation and Social Agents, Chengdu, China, May 26-28 2011.

- Huynh, L. K., King, S. A., "Low-Cost Solutions For Making Hands-Free Video Games", GET 2011: IADIS International Conference Game and Entertainment Technologies, Rome Italy, July 22-24, 2011
- Scott A. King "Animating Speech in Games", Motion in Games 2008 (MIG '08), Utrecht, The Netherlands, 14-17 June, 2008.
- S. A. King, 'Real-Time Facial Animation and Speech Synchronization Techniques Applicable to 3D Games", New Zealand Game Developer's Conference, Dunedin, New Zealand, 26-29 Jun, 2004.
- S. A. King, A. Knott, and B. McCane, "Language-driven nonverbal communication in a bilingual conversational agent", Computer Animation and Social Agents '03, Rutgers, NJ, 7-9 May 2003
- Scott A. King and Richard E. Parent, "Lip Synchronization for Song", Computer Animation 2002, Geneva Switzerland, 19–21 June 2002.
- Scott A. King, Richard E. Parent, and Barbara Olsafsky, "An Anatomically-Based 3D Parametric Lip Model to Support Facial Animation and Synchronized Speech", Deform 2000, , Geneva, Switzerland, 29–30 Nov 2000.
- Invited Talks "Automated lip-synchronized animation from text", Motion In Games 2009, Zeist, The Netherlands, 24 Nov, 2009
 - "Graphics at TAMU-CC", TexGraph 2007, Texas A&M University, College Station, Tx, May 17, 2007
 - "Motion Capture for Facial Animation Research", University of Texas Dallas, Dallas, Tx, October 16, 2006
 - "Talking Heads, Trees and Visualization", TexGraph 2005, Texas A&M University, College Station, Tx, May 7, 2005
 - "Speech Synchronized Animation", Texas A&M University Corpus Christi, Computer Science Club, lightning talks, 28 October 2004
 - "Towards a 3D Conversational Agent", Texas A&M University Corpus Christi, Computer & Mathematical Sciences Department, 12 July 2004
 - "Facial Animation Techniques Applicable for Games", Otago Student Chapter of The International Game Developers Association, 24 May 2004
 - "Kare, A bi-lingual animated conversational agent", Computer and Information Science Seminar Series, University of Otago, May 30, 2003
 - "Graphics and Vision Research at the University of Otago", Hit Lab NZ, Feb,2003
 - "Issues With Lip-synch Animation: Can You Read My Lips?" Computer Animation 02, 19-21 June, Geneva, 2002, with Rick Parent
 - "Speech-Synchronized Animaiton", University of Utah, Dec. 2001
 - "Facial Animation", Columbus Chapter of the ACM, June, 1998

- Author Huynh, D. (Presenter), King, S. A., Katangur, A. K., "A framework for cost-effective communication system for 3d data streaming and real-time 3d reconstruction," IWISC '18, ACM, Dallas Texas. (January 2018).ACM, Dallas Texas.
 - Do, D., King, S. A., Sheta, A., Hu, J. (Presenter), "Implementation of an integrated ambient intelligence system," IUCC 2017, IEEE, Guangzhou China. (December 2017).
 - Hamner, R. M. (Presenter), Selwyn, J., Krell, E., King, S., Bird, C. E., "Modeling next-generation sequencer sampling error dramatically reduces false positives in genetic structure test," Society for the Study of Evolution, Portland, OR. (2017).
 - Pinnaka, V. D. (Presenter), King, S. A., "3D Data Streaming Using Single Board Computers For SmartLab," Texas A&M System 13th Annual Pathways Student Research Symposium, Prairie View, Texas. (November 4, 2016).
 - Huynh, D. (Presenter), King, S. A., "DEVELOPMENT OF A STANDARDIZED FRAMEWORK FOR COST-EFFECTIVE COMMUNICATION SYSTEM BASED ON 3D DATA STREAMING AND REAL-TIME 3D RECONSTRUCTION," Texas A&M System 13th Annual Pathways Student Research Symposium, Prairie View, Texas. (November 4, 2016).
 - Hu, J. (Presenter), King, S. A., "Facial Emotion Recognition using Deep Learning," Texas A&M System 13th Annual Pathways Student Research Symposium, Prairie View, Texas. (November 4, 2016).
 - Zhou, X. (Presenter), King, S. A., "Real-Time Realistic Face Model Renderer," Texas A&M System 13th Annual Pathways Student Research Symposium, Prairie View, Texas. (November 4, 2016).
 - Sadovski, A. L. (Presenter), Montagna, P. A., King, S. A., "Modeling and visualization of the marshes vegetation," UNESCO Our Common Future, UNESCO, Paris, France. (July 7, 2015).
 - Sadovski, A. L. (Presenter), Montagna, P. A., King, S. A., Nelson, K. C., Palmer, T., Turner, E. L., "Nueces Delta Ecological Modeling," ECSA 53 Estuaries and Coastal Areas in the time of intense change, ECSA, Elsevier, ECNU, SKLEC, Shanghai, China. (October 14, 2013).
 - Sadovski, A. L. (Presenter), Montagna, P. A., King, S. A., Turner, E. L., "MOD-ELING AND VISUALIZATION OF THE MARSHES VEGETATION," ASLO 2013: Aquatic Sciences Meeting, Association for the Sciences of Limnology and Oceanograp, New Orleans. (February 20, 2013).
 - Teng, M. Y., Mehrubeoglu, R., King, S. A., Cammarata, K., Simons, J., "Determining Percent Epiphyte Coverage of Seagrass using Hyperspectral Imaging and Parallel Programming," 11th Annual TAMUS Pathways Symposium, Galveston, TX. (November 2012).
 - Anh Tuan Do (Presenter), Scott A. King, "Creating Emotional Speech for Conversational Agents", 2011 Workshop on Digital Media and Digital Content Management, Hangzhou, China, 15-16 May 2011.

- Chen G (Presenter), King S. A., Scherger, M., "Robot Remote Control Using Bluetooth and a Smartphone Augmented System", 3rd International Asia Conference on Informatics in Control, Automation and Robotics (CAR 2011), Shenzen, China, December 24-25, 2011
- Ortiz, J. M. (Presenter), King, S. A. (Author), "An Interactive Visualization Tool to Explore the Geoid," A&M University-Corpus Christi Tenth Annual Undergraduate Research Symposium, Corpus Christi, Texas. (October 2010).
- Ray Bachnak (Presenter), Scott King "Non-Destructive Evaluation and Position Tracking of Flaws in Conductive Materials", 12th Int. Conf. on Systems Crete, Grece, 22-24 Jul 2008.
- Ray Bachnak (Presenter), Scott King "Non-Destructive Evaluation and Flaw Visualization Using an Eddy Current Probe", Third International Conference on Systems, Cancun, Mexico, 13-18 April, 2008.
- Sperry, R. A. (Presenter), King, S. A., Fernandez, J. D., "Is a 3-D image necessary to determine eye gaze?," CCSC:SC Annual Conference, CCSC:SC, Wichita Falls, TX. (April 2007).
- R. Bachnak (Presenter), S. A. King, W. Maeger and T. Nguyen "Eddy Current System for Material Inspection and Flaw Visualization", 6th WSEAS International Conference on Applications of Electrical Engineering, , Instanbul, Turkey, 27-29 May 2007.
- Jeremy Burgess, Geoff Wyvill (Presenter) and Scott A. King, "A System for Real-Time Watercolour Rendering", Computer Graphics International 2005, Stony Brook, NY, USA, June 22-24, 2005.
- Z. Lam and S. A. King, "Simulating tree growth based on internal and environmental factors", GRAPHITE 2005, , Dunedin, New Zealand, 29 Nov 2 Dec 2005.
- Andrew Wood (Presenter), Brendan McCane, and Scott A. King, "Ray Tracing Arbitrary Objects on the GPU", Image and Vision Computing New Zealand 2004, Akaroa, New Zealand, 21-23 Nov 2004.
- Alexis Angelidis (Presenter), Marie-Paule Cani, Geoff Wyvill and Scott King, "Swirling-Sweepers: Constant-Volume Modeling", Pacific Graphics 2004, Seoul, Korea, Oct 6-8, 2004.
- J. Burgess (Presenter) and S. A. King, "A System for Watercolour Rendering", Image and Vision Computing New Zealand 2004, Akaroa, New Zealand, 21-23 Nov, 2004.
- Will Baker (Presenter) and Scott A. King, "Interactive Modelling of Hair with Texture Maps", Image and Vision Computing New Zealand 2003, Palmerston North, NZ, 26-28 Nov, 2003.
- Z. Lam (Presenter) and S. A. King, "Animation of Tree Development", Image and Vision Computing New Zealand 2003, Palmerston North, NZ,26-28 Nov, 2003.

M.S. Lorenzo (Presenter), J.D. Edge, S.A. King and S. Maddock, "Use and Re-use of Facial Motion Capture Data", Vision, Video, and Graphics 2003, Bath, UK, 10-11 July 2003

Rick Parent (Presenter), Scott King and Osamu Fujimura, "Issues with lip-synch animation: can you read my lips?", Computer Animation 2002, Geneva, Switzerland, 19–21 June, 2002.

S. King, R.A. Crawfis (Presenter) and W. Reid, "Fast Animation of Amorphous and Gaseous Volumes", International Workshop on Volume Graphics, 24 - 25 March 1999, Swansea, United Kingdom

R. Yagel (Presenter); D. Stredney; G.J. Wiet; P. Schmalbrock; L. Rosenberg; D.J. Sessanna; Y. Kurzion; S. King, "Multisensory platform for surgical simulation", IEEE 1996 Virtual Reality Annual International Symposium, Santa Clara, CA, 30 March-3 April 1996.

Reviewing Experience

Ph.D. University of Otago - 2010, 2011, 2017

Dissertations University of Sydney - 2003

Masters University of Auckland - 2004

Theses University of Sydney - 2003

Journals Journal of Real-Time Image Processing, 2014, 2015, 2017

Computer Animation and Virtual Worlds 2009, 2014

Sensors, 2020

Symmetry, 2020

Multimodal Technologies and Interaction, 2020

Applied Sciences, 2020

IEEE Transactions on Visualization and Computer Graphics, 2000, 2001, 2003, 2004, 2005, 2006, 2007, 2011, 2012

Computer Graphics Forum, 2007, 2008, 2010, 2011

The Visual Computer, 2002, 2008, 2011

ACM Transactions on Graphics, 2006

IEEE Computer Graphics and Applications 2008, 2009, 2010

IEEE Transactions on Systems, Man, and Cybernetics, 2003

Grant National Science Foundation, 2018

Proposals The Netherlands Organisation for Scientific Research, 2012

Canada Foundation for Innovation, 2011

Research Grant Council of Hong Kong, 2011(2)

Conferences Computer Animation and Social Agents CASA, 2004-7, 2009-20

Image Vision Computing New Zealand IVCNZ, 2005-2020

Motion In Games (MIG), 2009-11, 2016

Ubiquitous Positioning, Indoor Navigation and Location-Based Services UPINLBS, 2014

SIGGRAPH, 2005, 2009

Advanced Concepts for Intelligent Vision Systems, ACIVS 2007

Consortium for Computing Sciences in Colleges: South Central Region, 2007, 2008

Eurographics short papers, 2005

Graphite, 2005

Mirage 2003 conference

New Zealand Game Developer Conference, 2004

Pacific Graphics, 2004

SIGGRAPH Asia 2008

SIGGRAPH CDRom Reviewer, 1998-2001

SIGGRAPH Course Reviewer, 1998-2000

SIGGRAPH Sketches, 1999

Books Wiley UK, 2001

Professional Memberships

Association for Computing Machinery (ACM) (Since 1985)

ACM Special Interest Group on Computer Graphics (Since 1985)

Institute of Electrical and Electronics Engineers (IEEE)

IEEE Computer Society

The Computer Graphics Society

EUROGRAPHICS

ABET IDEAL Scholoar

Teaching (* New Courses I Developed)

Texas A&M University - Corpus Christi

Undergrad AI Robotics, Computer Graphics*, Compiler Construction*, Computer System Software, Game Programming*, Introduction to Problem Solving with Computers I, Introduction to Problem Solving with Computers II, Mobile Programming*, Problem Solving*, Professional Skills

Grad AI Robotics, Advanced Computer Architecture, Advanced Computer Graphics*, Data Analytics*, Computer System Software, Grad Project-Tech Report, Game Programming*, GPU Programming*, Graphics and Visualization*, Intro to Computer Graphics*, Introduction to Scientific Programming*, Mobile Programming*, Numerical Analysis*, Principles of Compiler Construction*, Research Methods*

University of Otago

Undergrad Computer Graphics, Effective Programming, Computers for Professionals

Honours Computer Graphics, Special Topics in Computer Graphics and Vision

The Ohio State University

Sr/Grad Numerical Analysis

SIGGRAPH 2002

Workshop Course 28, "Motion Capture: Pipeline, Applications, and Use"

Students Advised

Doctoral

Current Laha Ale, Edge Computing, 2021 expected.

Leana Bouse, Assisted Living, 2021 expected.

Evan Krell, Autonomous Vehicle Control, 2021 expected.

Mahmoud Eldefrawy, Machine Learning, 2022 expected.

Hend Alkitawa, Image Processing, 2022 expected.

2019 Ismail Hadimlioglu, Flood Simulation and Visualization Framework using Position-Based Fluids, August 2019, *First GSCS program graduate.

Masters

Current Josh Boyd, 2021 Expected.

2021 Mayank Agarwala, FSDCNN: A Few Shot Detection Mechanism That Preserves its Supervised Nature, 2021 Expected.

Hue Dinh, Fog Prediction Using Deep Learning Models, 2021 Expected.

2020 Gabriel Alexis Guijarro Reyes, A Mixed Reality Testbed for Design and Validation of Estimation and Control Strategies for Unmanned Systems Research.

De Kwaan Wynn, Automatic Canopy Plot Boundary Detection Using Computer Vision.

2019 **Hamid Kamangir**, A Deep Learning Model to Predict Thunderstorms within 400 km^2 South Texas domains, Dec 2019.

Kuladeep Anand Kumar Maddula, Classification of Medical Images Using Metaheuristic Feature Selection Methods, Dec 2019.

Juan Martinez, Estimating sensorimotor disorders using Bayesian theory and probabilistic graphical models with mixed reality technology, Dec 2019.

Asha Nair, Follower Robot in an Integrated Ambient Intelligence System, Dec 2019.

Ogwo O. Ogwo, Medical Data Classification uing Binary Brain Storm Optimization, Dec 2019.

Jimmy Dani, Detecting Plant Phenotypes from 3D Point Cloud DAta, August 2019.

- **Mehmet Ozcan**, Using a USV to Efficiently Clear Uncertainty from Aerial Images for Rescue Boat Path Planning in Flooded Urban Environments, May 2019.
- 2018 Evan Krell, Autonomous Mission Planning for Unmanned Surface Vehicles Piloted by Multiple Specialized Agents Using Heuristic and Metaheuristic Techniques, Dec 2018.
 - Shubaraj Pradeep Arsekar, Hand Gesture Recognition System (HGRS) using Deep Learning, Dec 2018.
 - **Arun Balasubramanian**, A Cooperative Object Transport System With Behavior-Based Robots, Aug 2018.
 - **Thanh Pham**, Detection of Plant Characteristics and a Comparison of Effectiveness Between 2D and 3D Data Visualization in Supporting Human Perception of Plant Characteristics, May 2018.
- 2017 **Dhang Huynh**, Development of a Standardized Framework for Cost-Effective Communication System Based on 3D Data Streaming and Real-Time 3D Reconstruction, 2017.
 - **Jiaqi Hu**, A Personal Facial Expression Monitoring System Using Deep Learning, 2017.
 - Dat Do, An Infrastructure for Interactive Environments, 2017.
 - Vinay Pinnaka, Design and Implementation of SmartLab Infrastructure, 2017.
 - **Leana Bouse**, Voice and Gesture Integrated Development Environment: Keyboard Free Programming, Aug 2017.
 - Rahul Bethi, Kinect Game for Children with Intellectual Disability, 2017.
 - Ranjith Muddana, TAMUCC SAIL An Android Appplication to access S.A.I.L., 2015.
- 2015 **Dung Le**, Building 3D Models from Depth Sensor, 2015.
 - Akash Gaurav, Water Modeling, 2015.
- 2014 Kien Dinh, Blue Sky: A side-scroller computer game, 2014.
 - Shuyi Zhao, An Android Application for Facial Aesthetic Analysis, 2014.
 - Ming Yang Teng, Quantifying Epifauna Coverage on Seagrass Blades Using Hyperspectral Imaging and Graphics Processing Units, 2014.
- 2013 Ismail Hadimlioglu, Automated Musical Transitions Through Rule-Based Synthesis Using Musical Properties, 2013.
 - Gaowei Chen, 3D Environment Mapping using an RGB-D Camera, 2013.
- 2011 Praneeth Koralla, Mobile Geo-Tagging in Social Networks with Android, 2011.
 Kitay Diejomaoh, Broadening Participation in TAMUCC-Computer Science Program: Attracting and Retaining Females and other Minority Groups, MS 2011.
- 2010 Long Huynh Kim, Low-Cost Solutions for Making Hands-Free Video Games, 2010.

Ryan Edwards, Implementing Location Based Data Access and Visualizations, 2010.

Anh Tuan Do, "Creating Expressive Speech for Conversational Agents, 2010. Wei Wang, Muscle-based Facial Animation, 2010.

- 2009 Jason Picarazzi, "Position Tracking and Visualization System for a Sensor, 2009. Kithsiri Wijewardena, Animated Human Movement, 2009.
- 2008 Ramkumar Vangala, Visualization of Scientific Data, 2008.
- 2007 Rafal Dopierala, Visualization of Optical Speech Prosody, 2007.
- 2006 Geethanjali Gopal, Hair Modeling for Real-Time facial Animation, 2006.
 Larry Young, 2006.
 Stan Leja, Animated Speech Prosody Modeling, 2006.
- 2005 Jessica Dick, Visualization of Environmental Data in the Nueces Bay, 2005.
 University of Otago
- M.S. Adrew Wood, Simulation of water colour painting on a GPU, 2005.

 Zhuming Lam, Animation of tree development, 2004, awarded with distinction.
- Honours **Zhuming Lam**, 2004. **Damon Simpson**, 2004. **Will Baker**, 2004.
- Honours 2004: Will Baker, Zhuming Lam, Damon Simpson, .
 2003: Sonil Gopal, Anabel Keuh, Natalie Zhao.