JOSEPH J. LAVIOLA JR.
Curriculum Vitae

University of Central Florida
Department of Computer Science
Orlando, FL 32816-2362
(407) 882-2285
jjl@cs.ucf.edu
http://www.eecs.ucf.edu/~jjl/

RESEARCH INTERESTS

User interfaces, interactive 2D and 3D graphics, human robot interaction, pattern recognition

EDUCATION

2005: **Ph.D.**, Computer Science, Brown University
Dissertation: "Mathematical Sketching: A New Approach to Creating and Exploring Dynamic
Illustrations"
Advisor: Andries van Dam

2001: **Sc.M.**, Applied Mathematics, Brown University

2000: **Sc.M**., Computer Science, Brown University
Thesis: "Whole-Hand and Speech Input in Virtual Environments"

1996: **B.S**., Computer Science, Florida Atlantic University

PROFESSIONAL EXPERIENCE

2020-Present: Secondary Joint Appointment, Faculty Cluster Initiative – Learning Sciences Cluster,
University of Central Florida, Orlando, FL

2020-Present: Secondary Joint Appointment, Faculty Cluster Initiative – Disability, Aging, and
Technology Cluster, University of Central Florida, Orlando, FL

2018-Present: Charles N. Millican Professor of Computer Science, University of Central Florida,
Orlando, FL

2014-Present: Director of the Interactive Computing Experiences Research Cluster,
University of Central Florida, Orlando, FL

2008-Present: Affiliated Research Faculty, Institute for Simulation and Training, University of Central
Florida, Orlando, FL

2005-Present: Co-founder and VP of Business Strategy, Fluidity Software, Inc., Somerville, MA

2000-Present: Consultant, JJL Interface Consultants, Inc., Oviedo, FL

*Consulting services for user interface design and patent litigation.
My consultancies include Nextron Medical Technologies, Physion, Inc., Bellissima Cosmetics, Rosebud LMS, Inc., McKinsey and Co., Microsoft Research, Sixense Entertainment, Inc., SNR Denton, Williams & Connolly LLP, Activision, InGenius Prep, Meta, Raytheon, Shore, Chan, Depumpo, Blackberry, Supercell Oy, TeamLab, Magic Leap, Sony*

2019-2024: Visiting Scholar in Computer Science, Brown University, Providence, RI

2013-2018: Adjunct Associate Professor of Computer Science, Brown University, Providence, RI

2015-2018: Director of the Modeling and Simulation Graduate Program, University of Central Florida, Orlando, FL

2015-2018: Charles N. Millican Faculty Fellow and Associate Professor of Computer Science, University of Central Florida, Orlando, FL

2012-2015: CAE Link Professor and Associate Professor with Tenure in EECS, University of Central Florida, Orlando, FL

2006-2013: Adjunct Assistant Professor of Computer Science (Research), Brown University, Providence, RI

2010-2012: SAIC Faculty Fellow and Assistant Professor in EECS, University of Central Florida, Orlando, FL

2007-2010: Assistant Professor, University of Central Florida, Orlando, FL

2006-2009: Research Faculty, Microsoft Center for Research on Pen-Centric Computing, Providence, RI

2005-2006: Postdoctoral Research Associate, Brown University, Providence, RI

Continuing work in mathematical sketching as well as exploring how different orientation tracking algorithms work in augmented reality environments.

1998-2005: Research Assistant**,** Brown University Computer Graphics Lab, Providence, RI

Developed mathematical sketching, an approach to making dynamic illustrations through the combination of handwritten mathematics and free-form drawings and created a mathematical expression recognition system. Studied how different factors such as motion style, sampling rate, prediction time, and noise variance affected various prediction algorithms for human motion tracking in virtual environments. Explored how multimodal interfaces could be used in virtual environments as well as the general topic of improving 3D interfaces in virtual environments. Assisted in the startup and development of the Brown University Technology Center for Advanced Scientific Computing and Visualization.

1999: Teaching Assistant, Brown University, CS-295-5, Interdisciplinary Scientific Visualization

Maintained course web page, prepared class notes, graded homework.

1997: Research Scientist, Fraunhofer Center for Research in Computer Graphics, Providence, RI

Developed demonstration applications for a table-based virtual environment display system utilizing 2D and 3D gesture-based interface techniques.

1996: Software Technician, UCS, Inc., Fort Lauderdale, FL

Performed software test automation and software quality assurance.

1995: Student Intern, IBM, Boca Raton FL

Maintained SQL database query system and performed website development tasks.

HONORS AND AWARDS

2025: ACM CHI 2025 Best Paper Award (top 1% of all paper submissions)

2025: Inducted into the IEEE VGTC Virtual Reality Academy

2022: UCF Research Incentive Award (RIA)

2021: Inducted into the UCF Scroll and Quill Society

2021: ACM IUI 2021 Honorable Mention Paper

2019: Best Paper Award, 7th ACM Symposium on Spatial User Interfaces 2019

2019: Keynote speaker at the 7th ACM Symposium on Spatial User Interfaces 2019

2018: Appointed as the Charles N. Millican Professor of Computer Science

2018: Promoted to Full Professor in Computer Science at UCF

2018: UCF Scholarship of Teaching and Learning Award (SOTL)

2017: UCF Research Incentive Award (RIA)

2017: ACM CHI 2017 Honorable Mention Paper (top 5% of all paper submissions)

2016: Best Paper Award, Ninth IEEE International Conference on the Internet of Things 2016

2016: ACM CHI 2016 Honorable Mention Paper (top 4% of all paper submissions)

2015: Michael A. J. Sweeny Best Student HCI Paper Award – Graphics Interface 2015

2014: ACM CHI 2014 Honorable Mention Paper (top 5% of all paper submissions)

2014: UCF Reach for the Stars Award

2013: UCF Teaching Incentive Program Award (TIP)

2013: UCF Scholarship of Teaching and Learning Award (SOTL)

2013: UCF College of Engineering and Computer Science Deans Research Professorship Award

2013: UCF College of Engineering and Computer Science Excellence in Graduate Teaching Award

2012: Appointed the CAE Link Professor in Electrical Engineering and Computer Science at UCF

2012: UCF Research Incentive Award (RIA)

2012: Named IEEE Senior Member

2011: Best Paper Award, 8th International Conference on Advances in Computer Entertainment Technology

2011: Named ACM Senior Member

2011: Best Poster Award, Eurographics/ACM Symposium on Sketch-Based Interfaces and Modeling

2011: Named to the Eurographics Sketch-Based Interfaces and Modeling steering committee

2010: Appointed the SAIC Faculty Fellow in Electrical Engineering and Computer Science at UCF

2010: ACM CHI 2010 Honorable Mention Paper (top 5% of all paper submissions)

2010: UCF College of Engineering and Computer Science Distinguished Researcher Award

2009: Best Paper Award, Eurographics/ACM Symposium on Sketch-Based Interfaces and Modeling

2009: National Science Foundation CAREER Award

2008: Best Paper Award, 9th International Symposium on Smart Graphics

2007: UCF Presidential Major Equipment Award

2006: Best Paper Award, Eurographics Workshop on Sketch-Based Interfaces and Modeling

2004: Best Paper Presentation (Applied Estimation Session), 2004 American Control Conference

2000-2002, 2004: The van Dam Fellowship

1998: IBM Cooperative Fellowship

1996: FAU's Aaron Finerman Award

1996: FAU's Faculty Award for Outstanding Undergraduate Achievement

1995: Microsoft Senior Achievement Award

Also elected to Sigma Xi (1998), Phi Kappa Phi (1995), and Phi Eta Sigma (1993)

RESEARCH CONTACTS AND GRANTS

Total Funding: $10,012,981
Total as PI: $6,876,194
Total as Co-PI: $3,136,332
My Share at UCF: $6,920,850

Active Grants and Contracts

"Multimodal Team-Performance Models for Assessing and Influencing Team-Dimension Competencies in Virtual Reality – Year 2", US Army Research Lab – DEVCOM Award W912CG2320004, $314,317, PI (70% credit equals $220,022), Sept. 2024 – Sept. 2025.

"Multimodal Team-Performance Models for Assessing and Influencing Team-Dimension Competencies in Virtual Reality", US Army Research Lab – DEVCOM Award W912CG2320004, $387,776, Co-PI (30% credit equals $116,332), Sept. 2023 – Sept. 2025.

Past Grants and Contracts

"FW-HTF-RM: Addressing and Amplifying the Skills of the Future Hispanic and Latino Construction Workforce Using BIM and Augmented Reality", NSF Award CNS-2326134, $985,135, Co-PI (25% credit equals $246,283), Oct. 2023 – Apr. 2025.

"DARPA Perceptually-enabled Task Guidance (PTG) Program", Northrup Grumman Corporation, $960,796, PI (59% credit equals $569,391), Jan. 2022 – Dec. 2024.

"FHTCC: DARPA Perceptually-enabled Task Guidance (PTG) Program-Phase 1, Year 2", UCF/I-4 Match, $126,383, PI (50% credit equals $63,191), Mar. 2023 – Dec. 2024.

"DARPA Situational Awareness Virtual Environment (SAVE) Program", Northrup Grumman Corporation, $141,108, Co-PI (50% credit equals $70,554), Sept. 2023 – Oct. 2024.

"Context-aware Opportunistic Sensing for Indoor Navigation Environment (COSINE)", Unknot.id, $246,072, Sole PI (100% credit), Aug. 2022 – Jan. 2024.

"FHTCC: Context-aware Opportunistic Sensing for Indoor Navigation Environment (COSINE)", UCF/I-4 Match, $145,830, Sole PI (100% credit), Aug. 2022 – Jan. 2024.

"FHTCC: DARPA Perceptually-enabled Task Guidance (PTG) Program", UCF/I-4 Match, $126,383, PI (50% credit equals $63,191), Jan. 2022 – Nov. 2023.

"Retraining Built Environment Retrofitting Problem Solving Skills with Augmented Reality", NSF Award IIS-1917728, $749,998, Co-PI (25% credit equals $187,500), Oct. 2019 – Sept. 2023.

"Veterans Affairs IPA", Corporal Michael J Crescenz VA Medical Center, $43,570, Sole PI (100% credit), Mar. 2020 – Mar. 2022.

"Human-Swarm Interaction for the DARPA OFFSET Program", Northrup Grumman Corporation, $712,214, Sole PI (100% credit), Mar. 2018 – Dec. 2021.

"FHTCC: Human-Swarm Interaction for the DARPA OFFSET Program", UCF/I-4 Match, $190,808, Sole PI (100% credit), Mar. 2018 – Dec. 2021.

"Augmented Reality-Based Intelligent Tutoring in the Wild", US Army RDECOM –STC Award W911QX13C0052, $618,376, Sole PI (100% credit), Dec. 2014 – Sept. 2020.

"NRI: Collaborative Research: Sketching Geometry and Physics Informed Inference for Mobile Robot Manipulation in Cluttered Scenes", NSF Award IIS-1638060, $286,434, Sole PI (100% credit), Sept. 2016 – August 2020.

"Peraton User Testing", Peraton, $80,315, Co-PI (50% credit equals $40,157), Aug. 2019 – Dec. 2019.

"Interactive Visualization in Support of Decision Making under Uncertainty", Office of Naval Research Award ONRBAA15001, $660,000, Co-PI, (54.5% credit equals $360,000), Sept. 2015 – May 2019.

"RF: Improving Augmented Reality Technologies for Training and Education", Lockheed Martin Corporation, $200,000, PI (80% credit equals $160,000), Aug. 2016 – Aug. 2018.

"FHTCC: Improving Augmented Reality Technologies for Training and Education", UCF/I-4 Match, $66,666 PI (80% credit equals $52,800), Aug. 2016 – Aug. 2018.

"Exploring the Benefits of Spatial IDEs", Coda Enterprises, LLC, $47,500, Sole PI (100% credit), Jan. 2016 – May 2017.

"Physics Based Multi-Touch Movement Interface Creation for 3D Modeling and Simulation, Phase II", JHT Incorporated Award JHT13S0002 (Navy SBIR Phase II, Topic N121-061), $187,500, Sole PI (100% credit), Oct. 2013 – Mar. 2016.

"Physics Based Multi-Touch Movement Interface Creation for 3D Modeling and Simulation, Phase II", UCF/I-4 Match, $122,270, Sole PI (100% credit), Aug. 2013 – Mar. 2016.

"CAREER: Mathematical Sketching: Pen-based Tools for Conceptual Understanding in Mathematics and Physics", NSF CAREER Award IIS-0845921, $459,776, Sole PI (100% credit), May 2009 – April 2016.

"REU Supplement to CAREER: Mathematical Sketching: Pen-based Tools for Conceptual Understanding in Mathematics and Physics", NSF CAREER Award IIS-0845921, $80,000, Sole PI (100% credit),   May 2009 – April 2016.

"SHF: Large: A Working Set Approach to Integrated Development Environments", NSF Award CCF-1012056, Sole PI (100% credit) on Subcontract from Brown University, $179,823 of $1,123,918, Aug. 2010 – July 2015.

"Major: Enhancing Creativity and Authoring in STEM Education-Based Virtual Worlds through Concept-Oriented Design", NSF Award IIS-0856045, $753,835 PI (70% credit equals $527,684), July 2009 – June 2014.

"REU Supplement to Major: Enhancing Creativity and Authoring in STEM Education-Based Virtual Worlds through Concept-Oriented Design", NSF Award IIS-0856045, $40,000, Sole PI (100% credit), July 2010 – June 2014.

"Healthcare Informatics, Implementation, Long Term Care and Aging", James A. Haley Veterans' Hospital, $26,661, Sole PI (100% credit), April 2013 – Mar. 2014.

"Feasibility for the Development of a Physics, Navigation, and Meta Gestures API for Training, Simulations, and Entertainment", JHT Incorporated Award JHT12S0003 (Navy SBIR Phase I, Topic N121-061), $42,100, Sole PI (100% credit), June 2012 – Dec. 2013.

"Feasibility for the Development of a Physics, Navigation, and Meta Gestures API for Training, Simulations, and Entertainment", UCF/I-4 Match, $14,033, Sole PI (100% credit), July 2012 – Dec. 2013.

"Extending Smart Home Technology for Cognitively Impaired Veterans to Delay Institutionalization (Part II)", James A. Haley Veterans' Hospital, $33,000, Sole PI (100% credit), April 2013 – Sept. 2013.

"Naturalistic Operator Interface for Immersive Environments", Design Interactive, Inc. Award EGO6389UCF (DoD OSD SBIR Phase I), $49,700, PI (50% credit equals $24,850), March 2013 – Aug. 2013.

"Naturalistic Operator Interface for Immersive Environments", UCF/I-4 Match, $16,666, PI (50% credit equals $8,333), March 2013 – Aug. 2013.

"Robot Platforms for Research and Education in Human Robot Interaction", UCF Major Research Equipment Award, $54,200, PI (50% credit equals $27,100), Feb. 2013 – June 2013.

"Dynamic 3D Stereo Visualization of Physics Concepts through a Hybrid Stylus Interface", Infinite Z, $10,000, PI (100% credit), Dec. 2012 – Aug. 2013.

"VR and Gaming Project Exploration", James A. Haley Veterans' Hospital Award VA673C10812, $40,000, PI (100% credit), Sept. 2011 – Jan. 2013.

"Personalized Self-Efficacy Virtual Environment Recovery Experience (PERSEVERE)", Intelligent Automation, Inc. Award 9762 (NIH SBIR Phase I, Topic 141), $15,889, PI (100% credit), Aug. 2012 – Jan. 2013.

"Realistic Full Body Interfaces for Locomotion and Communication in 3D Virtual Environments", US Army RDECOM Award W91CRB-10-C-0212, $175,000, PI (100% credit), Sept. 2010 – Dec. 2012.

"Prototyping Tools for Unobtrusive Mood Assessment", RDECOM-STC Award W91CRB-09-C-0504, $150,000, PI (100% credit), May 2009 – Sept. 2011.

"Deep Green Program Support", Science Applications International Corporation Award 4400157271, $60,247, Sole PI (100% credit), June 2008 – June 2009.

"Deep Green Program Support", UCF/I-4 Match, $33,614, Sole PI (100% credit), July 2008 – June 2009.

"Interaction and the Analyst Workstation of the Future", US Air Force Research Lab Award FA87500820202, $70,000, Sole PI (100% credit), June 2008 – June 2009.

"Sketching Mathematical Algorithms", US Air Force Research Lab A-SpaceX Award FA8750-08-C-0131, Sole PI (100% credit) on Subcontract from Brown University, $53,078 of $250,000, Feb. 2008 – Feb. 2009.

"Pre-Visualization of Content Creation and User Experience for Free-Choice Learning Venues", UCF Presidential Major Equipment Award, $47,574, PI (50% credit equals $23,787), Dec. 2007 – Nov. 2008.

"Sketching Mathematical Algorithms", Disruptive Technology Office A-SpaceX Award N61339-06-C-0186, Sole PI (100% credit) on Subcontract from Brown University, $75,943 of $350,000, Sept. 2006 – Dec. 2007.

"Adaptive Real-Time Learning for Mathematical Expression Recognition in Mathematical Sketching", NSF STTR Phase I Award OII-0611012, $132,000, Co-PI (23% credit), PI: Donald P. Carney, July 2006 – June 2007.

PUBLICATIONS

Total Citations (according to Google Scholar): 16433
h-index: 50

Books

Kulshreshth, A. and LaViola, J. *Designing Immersive Video Games Using 3DUI Technologies*, Springer, July 2018.

LaViola, J., Kruijff, E., McMahan, R., Bowman, D., and Poupyrev, I. *3D User Interfaces: Theory and Practice*, Second Edition, Addison Wesley, April 2017. (cited 1124 times, source: Google Scholar)

Bowman, D., Kruijff, E., LaViola, J., and Poupyrev, I. *3D User Interfaces: Theory and Practice*, Addison Wesley, July 2004. (cited 2440 times, source: Google Scholar)

Book Chapters

Cheema, S., and LaViola, J. "Using Animation to Enrich Learning Experience in Sketch-Based Physics Tutoring Systems". *Designing for the User Experience in Learning Systems*, E. Kapros and M. Koutsombogera (eds.), Springer, 201-227, October, 2018.

Vargas, A., Taranta, E., and LaViola, J. "Sketch Based Interaction Techniques for Chart Creation and Manipulation". *Frontiers in Pen and Touch*, T. Hammond, A. Adler, and M. Prasad (eds.), Springer, 65-82, December 2017.

Wang, G., Bowditch, N., Zeleznik, R., Kwon, M., and LaViola, J. "A Tablet-Based Math Tutor for Beginning Algebra". *Revolutionizing Education with Digital Ink*, T. Hammond, S. Valentine, and A. Adler (eds.), Springer, 91-102, June 2016.

LaViola, J., Buchanan, S., and Pittman, C. "Multimodal Input for Perceptual User Interfaces". *Interactive Displays*, A. Bhowmik (ed.), Wiley, 285-312, October 2014.

Williamson, B., Wingrave, C., and LaViola, J. "Full Body Locomotion with Video Game Motion Controllers". *Human Walking in Virtual Environments*, F. Steinicke, Y. Visell, J. Campos, and A. Lecuyer (eds.), Springer, 351-376, May 2013.

LaViola, J. "Mathematical Sketching: An Approach to Making Dynamic Illustrations". *Sketch-based Interfaces and Modeling*, J. Jorge and F. Samavati (eds.), Springer Verlag London Limited, 81-118, December 2010.

LaViola, J. "Input Devices", *Wiley Encyclopedia of Computer Science and Engineering*, B. Wah (ed.), Wiley, Vol.3, 1575-1584, January 2009.

LaViola, J., Prabhat, Forsberg, A., Laidlaw, D., and van Dam, A. "Virtual Reality-Based Interactive Scientific Visualization Environments". *Trends in Interactive Visualization: State-of-the-Art Survey*, E. Zudilova-Seinstra, T. Adriaansen, and R. van Liere (eds.), Springer Verlag London Limited, 225-250, January 2009.

Edited Books

LaViola, J., Pan, Z., Coquillart, S., and Schmalstieg, D. (eds.) *IEEE Virtual Reality 2013*, IEEE Press, March 2013.

Billinghurst, M., LaViola, J., and Lecuyer, A. (eds.) *IEEE Symposium on 3D User Interfaces 2012*, IEEE Press, March 2012.

LaViola, J., Hachet, M., and Billinghurst, M. (eds.) *IEEE Symposium on 3D User Interfaces 2011*, IEEE Press, March 2011.

Hachet, M., Kiyokawa, K., and LaViola, J. (eds.) *IEEE Symposium on 3D User Interfaces 2010*, IEEE Press, March 2010.

Grimm C. and LaViola J. (eds.). *ACM SIGGRAPH/Eurographics Symposium Proceedings: Sketch-Based Interfaces and Modeling 2009*, ACM Press, August 2009.

Refereed Journals and Periodicals

Pfeil, K., Badillo-Urquiolla, K., LaViola, J., and Wisniewski, P. " "Like I was There": A User Evaluation of an Interpersonal Telepresence System Developed through Value Sensitive Design", *Proceedings of the ACM on Human-Computer Interaction*, Vol. 8, No. CSCW2, Article 476 (18 pages), November 2024.

Hmaiti, Y., Maslych, M., Ghasemaghaei, A., Ghamandi, R., and LaViola, J. "Visual Perceptual Confidence: Exploring Discrepancies Between Self-reported and Actual Distance Perception In Virtual Reality", *IEEE Transactions on Visualization and Computer Graphics*, 30(11):7245-7254, November 2024.

Veldhuijzen, B., Veltkamp, R., Ikne, O., Allaert, B., Wannous, H., Emporio, M., Giachetti, A., LaViola, J., He, R., Benhabiles, H., Cabani, A., Fleury, A., Hammoudi, K., Gavalas, K., Vlachos, C., Papanikolaou, A., Romanelis, I., Fotis, V., Arvanitis, G., Moustakas, K., Hanik, M., Nava-

Yazdani, E., and von Tycowicz, C. "SHREC 2024: Recognition of Dynamic Hand Motions Molding Clay", *Computers and Graphics*, Volume 123, Article 104012 (11 pages), November 2024.

Sera-Josef, J., LaViola, J., and Bowen, E. "Classifying Ambulation Patterns in Institutional Settings", *Smart Health*, Volume 33, Article 100503 (8 pages), September 2024.

Pfeil, K., Badillo-Urquiolla, K., Belga, J., Sera-Josef, J., LaViola, J., and Wisniewski, P. "Using Co-Design with Streamers and Viewers to Identify Values and Resolve Tensions in the Design of Interpersonal Wearable Telepresence Systems", *Proceedings of the ACM on Human-Computer Interaction*, Vol. 8, No. CSCW1, Article 148 (21 pages), January 2024.

Vargas, A., Williamson, B., and LaViola, J. "Authoring Moving Parts of Objects in AR, VR and the Desktop", *Multimodal Technologies and Interaction*, 7(12): Article 117 (23 pages), December, 2023.

Sermarini, J., Michlowitz, R., LaViola, J., Walters, L., Azevedo, R., and Kider, J. "Investigating the Impact of Augmented Reality and BIM on Retrofitting Training for Non-experts", *IEEE Transactions of Visualization and Computer Graphics*, 29(11):4654-4664, November 2023.

Williamson, B., Taranta, E., Moolenaar, Y., and LaViola, J. "Command and Control of a Large Scale Swarm using Natural Human Interfaces", *Field Robotics*, 3, 301-322, 2023.

Catbas F., Luleci, F., Zakaria, M., Bagci, U., LaViola, J., Cruz-Neira, C., Reiners, D. "Extended Reality (XR) for Condition Assessment of Civil Engineering Structures: A Literature Review", *Sensors*, 22(23):9560, December 2022.

Caputo, A., Giachetti, A., Soso, S., Pintani, D., D'Eusanio, A., Pini, S., Borghi, G., Simoni, A., Vezzani, R., Cucchiara, R., Ranieri, A., Giannini, F., Lupinetti, K., Monti, M., Maghoumi, M., LaViola, J., Le, M., Nguyen, H., Tran, M. "SHREC 2021: Skeleton-based Hand Gesture Recognition in the Wild", *Computers and Graphics*, Volume 99, 201-211, October 2021.

Pfeil, K., Chatlani, N., LaViola, J., and Wisniewski, P. "Bridging the Socio-Technical Gaps in Body-worn Interpersonal Live-Streaming Telepresence through a Critical Review of the Literature", *Proceedings of the ACM on Human-Computer Interaction*, Vol. 5, No. CSCW1, Article 120 (39 pages), April 2021.

Taranta, E., Pittman, C., Maghoumi, M., Maslych, M., Moolenaar, Y., and LaViola, J. "Machete: Easy, Efficient, and Precise Continuous Custom Gesture Segmentation", *ACM Transactions of Computer-Human Interaction (TOCHI)*, 28(1): Article 5 (46 pages), January 2021.

Erickson, A., Norouzi, N., Kim, K., Schubert, R., Jules, J., LaViola, J., Bruder, G., and Welch, G. "Sharing Gaze Rays for Visual Target Identification Tasks in Collaborative Augmented Reality", *Journal of Multimodal User Interfaces*, 14(4):353-371, December 2020.

Erickson, A., Norouzi, N., Kangsoo, K., LaViola, J., Bruder, G., and Welch, G. "Effects of Depth Information on Visual Target Identification Task Performance in Shared Gaze Environments", *IEEE Transactions of Visualization and Computer Graphics*, 26(5):1934-1944, May 2020.

Vargas, A., Kapalo, K., Koh, S., and LaViola, J. "Exploring the Virtuality Continuum for Complex Rule-Set Education in the Context of Soccer Rule Comprehension", *Multimodal Technologies and Interaction*, 1(4): Article 30 (15 pages), November 2017.

Kulshreshth, A., Pfeil, K., and LaViola, J. "Enhancing the Gaming Experience Using 3D Spatial User Interface Technologies", *IEEE Computer Graphics and Applications*, 38(3):16-23, May-June 2017.

Taranta, E., Vargas, A., Compton, S. and LaViola, J. "A Dynamic Pen-Based Interface for Writing and Editing Complex Mathematical Expressions with Math Boxes", *ACM Transactions on Interactive Intelligent Systems*, 6(2): Article 13 (25 pages), August 2016.

Taranta, E., Vargas, A., and LaViola, J. "Streamlined and Accurate Gesture Recognition with Penny Pincher", *Computers and Graphics*, Volume 55, 130-142, April 2016.

Bott, J. and LaViola, J. "The WOZ recognizer: A Wizard of Oz Sketch Recognition System", *ACM Transactions on Interactive Intelligent Systems*, 5(3): Article 15 (38 pages), October 2015.

Taranta, E., Simons, K., Sukthankar, R., and LaViola, J. "Exploring the Benefits of Context in 3D Gesture Recognition for Game-Based Virtual Environments", *ACM Transactions on Interactive Intelligent Systems*, 5(1):Article 1 (34 pages), March 2015.

Khuong, B., Kiyokawa, K., Miller, A., LaViola, J., Mashita, T., and Takemura, H. "Context-Related Visualization Modes of an AR-Based Context-Aware Assembly Support System in Object Assembly", *Transactions of the Virtual Reality Society of Japan*, 19(2):195-205, June 2014.

Buchanan, S. and LaViola J., "CSTutor: A Sketch-Based Tool for Visualizing Data Structures", *ACM Transactions of Computing Education*, 14(1):Article 3 (28 pages), March 2014.

Reiss, S., Bott, J., and LaViola, J., "Plugging In and Into Code Bubbles: The Code Bubbles Architecture", *Journal of Software: Practice and Experience*, 44(3):261-276, March 2014.

LaViola, J., "3D Gestural Interaction: The State of the Field," *ISRN Artificial Intelligence*, Vol. 2013, Article ID 514641, 18 pages, 2013.

Gupta, P., Lobo, N., and LaViola, J. "Markerless Tracking and Gesture Recognition using Polar Correlation of Camera Optical Flow", *Machine Vision and Applications*, 24(3):651-666, April 2013.

Ellis, C., Masood, Z., Tappen, M., LaViola, J., and Sukthankar, R. "Exploring the Trade-off Between Accuracy and Observational Latency in Action Recognition", *International Journal of Computer Vision*, 101(3):420-436, February 2013. (cited 297 times, source: Google Scholar)

Cheema, S., Hoffman, M., and LaViola, J. "3D Gesture Classification With Linear Acceleration and Angular Velocity Sensing Devices for Video Games", *Entertainment Computing*, 4(1):11-24, February 2013.

Tomlinson, B., Patterson, D., Pan, Y., Blevis, B., Nardi, B. Silberman, S., Norton, J., and LaViola, J. "What If Sustainability Doesn't Work Out?", *Interactions*, 19(6):50-55, November/December 2012.

Varcholik, P., LaViola, J., and Hughes, C. "Establishing a Baseline for Text Entry for a Multi-Touch Virtual Keyboard", *International Journal of Human-Computer Studies*, 70(10):657-672, October 2012.

Cashion, J., Wingrave, C., and LaViola, J. "Dense and Dynamic 3D Selection for Game-based Virtual Environments", *IEEE Transactions on Visualization and Computer Graphics (Proceedings of Virtual Reality 2012)*, 18(4):634-642, April 2012. (cited 100 times, source: Google Scholar)

Miller, A., White. B., Charbonneau, E., Kanzler, Z., and LaViola, J. "Interactive 3D Model Acquisition and Tracking of Building Block Structures", *IEEE Transactions on Visualization and Computer Graphics (Proceedings of Virtual Reality 2012)*, 18(4):651-659, April 2012.

Xiong, Y. and LaViola, J. "A ShortStraw-Based Algorithm for Corner Finding in Sketch-Based Interfaces", *Computers and Graphics*, 34(5):513-527, October 2010.

Wingrave, C. and LaViola, J. "Reflection on the Design and Implementation of Virtual Environments", *PRESENCE: Teleoperators and Virtual Environments*, 19(2):179-195, April 2010.

Wingrave, C., Williamson, B. , Varcholik, P., Rose, J., Miller, A., Charbonneau, E., Bott, J. and LaViola, J. "Wii Remote and Beyond: Using Spatially Convenient Devices for 3DUIs", *IEEE Computer Graphics and Applications*, 30(2):71-85, March/April 2010. (cited 169 times, source: Google Scholar)

Wingrave, C., LaViola, J. and Bowman, D. "A Natural, Tiered and Executable UIDL for 3D User Interfaces Based on Concept-Oriented Design", *ACM Transactions on Computer-Human Interaction (TOCHI)*, 16(4):Article 21 (36 pages), November 2009.

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STUDENT ADVISING

Post-Doc:
Chadwick Wingrave (2008 – 2012)

PhD

Yahya Hmaiti, started Fall 2024

Akashdeep Chakraborty, started Spring 2024

Amirpouya Ghasemaghaei, started Fall 2022

Ryan Ghamandi, started Fall 2021

Mykola Maslych, started Fall 2021

Jacob Belga, started Fall 2020

Sina Masnadi, Ph.D. 2022. Dissertation Title: Distance Perception Through Head Mounted Displays

Ravikiran Kattoju, Ph.D. 2022. Dissertation Title: Automatic Posture Correction Utilizing Electrical Muscle Stimulation

Kevin Pfeil, Ph.D. 2022. Dissertation Title: Balancing User Experience for Mobile One-to-One Interpersonal Telepresence

Andres Vargas, Ph.D. 2022. Dissertation Title: Authoring Tools for Augmented Reality Scenario Based Training Experiences

Corey Pittman, Ph.D. 2021. Dissertation Title: Evaluating Augmented Reality Tools for Physics Education

Kate Kapalo, Ph.D. 2020. Dissertation Title: Reducing Information Overload in Situated Visualization For Firefighting: A Human Factors Evaluation of User Interface Prototypes for Displaying Pre-Incident Planning Information

Mehran Maghoumi, Ph.D. 2020. Dissertation Title: Deep Recurrent Networks For Gesture Recognition and Synthesis

Eugene Taranta, Ph.D. 2020. Dissertation Title: The Dollar General: Continuous Custom Gesture Recognition Techniques at Everyday Low Prices

Seng Lee Koh, Ph.D. 2018. Dissertation Title: Exploring Natural User Abstractions For Shared Perceptual Manipulator Task Modeling and Recovery

Sarah Buchanan, Ph.D. 2017. Dissertation Title: Exploring the Multi-touch Interaction Design Space for 3D Virtual Objects to Support Procedural Training Tasks

Jared Bott, Ph.D. 2016. Dissertation Title: The WOZ Recognizer: A Tool For Understanding User Perceptions of Sketch-based Interfaces

Arun Kulshreshth, Ph.D. 2015. Dissertation Title: Exploring 3D User Interface Technologies for Improving the Gaming Experience

Salman Cheema, Ph.D. 2014. Dissertation Title: Pen-Based Methods for Recognition and Animation of Handwritten Physics Solutions

Jeffrey Cashion, Ph.D. 2014. Dissertation Title: Intelligent Selection Techniques for Virtual Environments

Emiko Charbonneau, Ph.D. 2013. Dissertation Title: Bridging the Gap Between Fun and Fitness: Instructional Techniques and Real-World Applications for Full Body Dance Games

Paul Varcholik, Ph.D. 2011. Dissertation Title: Multi-Touch for General-Purpose Computing: An Examination of Text Entry

Masters:

Gabriela Shamblin, M.S., 2025, Thesis Title: The Impact of Visualization Styles on Movement Imitation Accuracy in Virtual Reality

Jose-Valentin Sera-Josef, M.S., 2025, Thesis Title: Increasing Bystander and Environmental Awareness Through Haptic Feedback

Wanyea Barbel, M.S., 2024, Thesis Title: Neurogaze in Virtual Reality: Assessing an EEG and Eye Tracking Interface Against Traditional Virtual Reality Input Devices

Jack Oakley, M.S., 2020, Thesis Title: The Effects of Gesture Presentation in Video Games

Samuel Cosgrove, M.S., 2020, Thesis Title: Navigating Immersive and Interactive VR Environments with Connected 360 Degree Panoramas

Chuck Greenwood, M.S., 2019, Thesis Title: Realtime Editing in Virtual Reality of Room Scale Scans

Pooya Khaloo, M.S., 2017, Thesis Title: Code Park: A New 3D Code Visualization Tool and IDE

Andres Vargas, M.S., 2014. Thesis Title: SKETCHART: A Pen-Based Tool for Chart Generation and Interaction

Kevin Pfeil, M.S., 2013. Thesis Title: An Exploration of Unmanned Aerial Vehicle Direct Manipulation Through 3D Spatial Interaction

Travis Cossairt, M.S. 2012. Thesis Title: SetPad: A Sketch-Based Tool for Exploring Discrete Math Set Problems

Tad Litwiller, M.S. 2010. Thesis Title: Evaluating the Benefits of 3D Stereo in Modern Video Games

Prince Gupta, M.S. 2010. Thesis Title: Markerless Tracking Using Polar Correlation of Camera Optical Flow

Brian Williamson, M.S. 2009. Thesis Title: RealNav: Exploring Natural User Interfaces for Locomotion in Video Games

Jared Bott, M.S. 2009. Thesis title: VectorPad: A Tool for Visualizing Vector Operations

Undergraduate:

Yahya Hmaiti, B.S. 2024. Honors Thesis title: The Effects of Head-Centric Rest Frames on Egocentric Distance Perception in Virtual Reality

Anamary Leal, B.S. 2009. Honors Thesis title: Exploring the Effectiveness of 3D File Browsing Techniques for File Searching Tasks

Thesis and Dissertation Committees:

Yanlai Wu, Ph.D., Modeling and Simulation, 2025

Tiffany Do, Ph.D., Computer Science, 2024

Xinyu Hu, Ph.D., Computer Science, 2023

Alec Moore, Ph.D., Computer Science, 2022

Pauline Johnson, M.S., Computer Science, 2022

Joshua Nelson, Ph.D., Industrial Engineering and Management Systems, 2020

Enes Karaaslan, Ph.D., Civil, Environmental, and Construction Engineering, 2019

Saif Alabachi, Ph.D., Electrical and Computer Engineering, 2019

Jason Hochreiter, Ph.D., Computer Science, 2019

Paul Szerlip, Ph.D., Computer Science, 2015

Amy Hoover, Ph.D., Computer Science, 2014

Yiyan Xiong, Ph.D., Computer Science, 2014

Bennie Lewis, Ph.D., Computer Science, 2014

Subhabrata Bhattacharya, Ph.D., Computer Science, 2013

Joseph Keebler, Ph.D. Psychology, 2011

Kennard Laviers, Ph.D. Computer Science, 2011

Juraj Obert, Ph.D. Computer Science, 2010

Dustin Chertoff, Ph.D., Modeling and Simulation, 2009

Jingen Liu, Ph.D., Computer Science, 2009

TEACHING

* indicates courses I developed and have revised through the years

Course Number	Course Title	Credits	Class	Semester	# of Students	Students Eval Score (out of 5)
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2024	19	3.6
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2023	11	3.5
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2023	12	3.33
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2022	9	3.0
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2022	18	4.55
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2021	14	3.0
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2021	8	4.0
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2020	25	3.23
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2020	7	2.67
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2019	12	2.5
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2019	12	4.5
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2018	13	3.5
CAP 6121*	3D User Interfaces for	3	Grad	Spring 2018	10	3.75

	Games and Virtual Reality					
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2017	17	3.17
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2017	15	4.38
CAP 6105*	Pen-Based User Interfaces	3	Grad	Fall 2016	7	4.67
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2016	13	4.38
CAP 6105*	Pen-Based User Interfaces	3	Grad	Fall 2015	13	4.0
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2015	15	4.12
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2014	12	4.0
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2014	6	5.0
CAP 6105*	Pen-Based User Interfaces	3	Grad	Fall 2013	7	4.5
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2013	12	4.0
COP 3503H	Honors Computer Science II	3	Ugrad	Fall 2012	17	3.75
CAP 6105*	Pen-Based User Interfaces	3	Grad	Fall 2012	9	4.67
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2012	19	3.75
COP 3223	Intro to Programming with C	3	Ugrad	Fall 2011	168	3.18
CAP 6105*	Pen-Based User Interfaces	3	Grad	Fall 2011	10	5.0
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2011	15	4.33
COP 3223	Introduction to C Programming	3	Ugrad	Fall 2010	226	3.43
CAP6105*	Pen-Based User Interfaces	3	Grad	Fall 2010	10	5.0
CAP 6121*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2010	13	4.5
CAP 6105*	Pen-Based User Interfaces	3	Grad	Fall 2009	14	3.85

COP 3223	Introduction to C Programming	3	Ugrad	Fall 2009	229	2.65
CAP 6938*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2009	14	4.0
CAP 6938*	Topics in Pen-Based User Interfaces	3	Grad	Fall 2008	13	4.0
CAP 6938*	3D User Interfaces for Games and Virtual Reality	3	Grad	Spring 2008	14	4.5
CAP 5937/6938*	Topics in Pen-Based User Interfaces	3	Grad	Fall 2007	19	4.17
COP 3502H	Honors Computer Science I	3	Ugrad	Spring 2007	19	2.89

Other courses taught:

ISC 2215: Applications of Calculus I, UCF EXCEL Program, Co-Instructor (Spring 2012)

ISC 2216: Applications of Calculus II, UCF EXCEL Program, Co-Instructor (Spring 2012)

ISC 2215: Applications of Calculus I, UCF EXCEL Program, Co-Instructor (Fall 2011)

ISC 2215: Applications of Calculus I, UCF EXCEL Program, Co-Instructor (Spring 2011)

ISC 2216: Applications of Calculus II, UCF EXCEL Program, Co-Instructor (Spring 2011)

ISC 2215: Applications of Calculus I, UCF EXCEL Program, Co-Instructor (Fall 2010)

ISC 2215: Applications of Calculus I, UCF EXCEL Program, Co-Instructor (Spring 2010)

ISC 2216: Applications of Calculus II, UCF EXCEL Program, Co-Instructor (Spring 2010)

ISC 2215: Applications of Calculus I, UCF EXCEL Program, Co-Instructor (Fall 2009)

CS 193-33: Independent Study with Michael Katzourin, Department of Computer Science, Brown University (Fall 2006)

INVITED TALKS

"Gesture Recognition: Key Insights and Future Directions"

- Brown University, Providence, RI (November 2019)

- Seventh ACM Symposium on Spatial User Interfaces, New Orleans, LA (October 2019)

"3D Spatial User Interfaces: Past, Present, and Future from the Virtual to the Real"

- Brown University, Providence, RI (May 2015)

"Intelligent Tutoring Interfaces with Mathematical Sketching"

- Duke University, Durham, NC (December 2014)

- Arizona State University, Phoenix, AZ (November 2013)

"QuickDraw: Improving Drawing for Geometric Diagrams"

- Microsoft Research Faculty Summit 2012, Redmond, WA (July 2012)

"3D Spatial Interaction with Commodity Hardware"

- GameTech 2012 Users' Conference, Orlando, FL (March 2012)

"Towards Intelligent Tutoring with Mathematical Sketching"

- INRIA Bordeaux - Sud-Ouest , Talence Cedex, France (July 2011)

- Microsoft Research, Redmond, WA (May 2011)

"Spatial 3D Interaction and Video Games"

- Washington University in St. Louis, St. Louis, MO (December 2008)

- Electronic Arts, Maitland, FL (August 2008)

"Research at the Interactive Systems and User Experience Lab"

- The Burnett Honors College, Orlando, FL (July 2008)

"Mathematics, Physics, and Chemistry: Tablet PC Research and Education"

- Florida Virtual School 14th Annual Staff Conference, Orlando, FL (September 2010)

- Modeling, Simulation, and Training techCAMP, Orlando, FL (January 2008)

- Modeling, Simulation, and Training techCAMP, Orlando, FL (November 2007)

"Mathematics, Physics, and Chemistry: Tablet PC Research and Education at Brown University"

- Pace University, NY, NY (April 2006)

"Mathematical Sketching: A New Approach for Creating and Exploring Dynamic Illustrations"

- ■ Workshop on Computer Graphics: Current Trends in Research and Industry, Lahore University of Management Science, Pakistan (July 2007)
- ■ SUNY Stony Brook, Stony Brook, NY (March 2006)
- ■ Lehigh University, Bethlehem, PA (March 2006)
- ■ University of Central Florida, Orlando, FL (March 2006)
- ■ Aptima, Woburn, MA (September 2005)
- ■ Wolfram Research, Champaign, IL (May 2005)
- ■ Microsoft Research, Redmond, WA (February 2005)
- ■ IBM Thomas J. Watson Research Center, Hawthorne, NY (December 2004)

SERVICE TO THE PROFESSION

Associate Editor: ACM Transactions on Interactive Intelligent Systems (2013-present)
International Journal of Human-Computer Studies (2010-present)
IEEE Computer Graphics & Applications (2013-2018)

NSF Panelist: Computer & Information Science &Engineering Directorate (February 2023)
Computer & Information Science &Engineering Directorate (April 2019)
Computer & Information Science &Engineering Directorate (January 2018)
Computer & Information Science &Engineering Directorate (April 2016)
Computer & Information Science &Engineering Directorate (April 2015)
Computer & Information Science & Engineering Directorate (May 2014)
Computer & Information Science & Engineering Directorate (September 2013)
Computer & Information Science & Engineering Directorate (April 2012)
Computer & Information Science & Engineering Directorate (April 2010)
Computer & Information Science & Engineering Directorate (January 2009)
Computer & Information Science & Engineering Directorate (September 2009)

General Chair: Eurographics Symposium on Sketch-Based Interfaces and Modeling 2010

Program Chair: IEEE Virtual Reality 2013
IEEE Symposium on 3D User Interfaces 2012
IEEE Symposium on 3D User Interfaces 2011
IEEE Symposium on 3D User Interfaces 2010
Eurographics Symposium on Sketch-Based Interfaces and Modeling 2009

Associate Program Chair: ACM Intelligent User Interfaces 2012
Foundations of Digital Games 2012

Steering Committees: Eurographics Symposium on Sketch-Based Interfaces and Modeling (2011-2013)

Panels Chair: IEEE Virtual Reality 2006
Publications Chair: IEEE Virtual Reality 2007-2009

Program Committees: ACM Symposium on Spatial User Interaction (2013, 2014, 2018,2023,2024, 2025)
ACM Virtual Reality Software and Technology (2009-2010)
ACM Intelligent User Interfaces (2009, 2020, 2023)
Eurographics Short Papers Program (2008)
Graphics Interface (2024, 2025)
IEEE Symposium on 3D User Interfaces (2007-2009, 2014, 2017)
IEEE Virtual Reality (2007-2011, 2014, 2025)
IEEE AIVR (2019,2020)
Eurographics Symposium on Sketch-Based Interfaces and Modeling (2007-2008, 2011, 2012, 2013, 2014, 2017)
IEEE International Symposium on Mixed and Augmented Reality (2007, 2024, 2025)
2nd International Symposium on Visual Computing (2006)

Journal Reviewer: *ACM Transactions on Human Robot Interaction* (2021)
Human Computer Interaction (2015)
Computer Vision and Image Understanding (2014)
Presence: Teleoperators and Virtual Environments (2014)
IEEE Transactions on Neural Systems and Rehabilitation Engineering (2012)
ACM Transactions on Multimedia Computing Communications and Applications (2011)
ACM Transactions on Interactive Intelligent Systems (2010-2011,2020)
Journal of Visual Languages and Computing (2009)
ACM Transactions on Computer-Human Interaction (2009, 2014, 2019, 2022)
IEEE Transactions on Aerospace and Electronic Systems (2009)
International Journal of Human Computer Studies (2008-2011)
Pattern Recognition (2007)
Computers and Graphics (2001, 2006- 2008,2010,2011, 2013, 2018)
IEEE Transactions on Pattern Analysis and Machine Intelligence (2007)
IEEE Computer Graphics and Applications (2002-2003, 2005-2006, 2008, 2009)
Computer Animation & Virtual Worlds (2006)
IEEE Transactions on Visualization and Computer Graphics (2005, 2006, 2010, 2011, 2019, 2021, 2022)
IEEE Transactions on Robotics (2005)
Virtual Reality (2005, 2010, 2012)
Pattern Recognition Letters (2005)
IEEE Transactions on Cognitive and Developmental Systems (2020)
IEEE Transactions on Learning Technologies (2021)
ACM Computing Surveys (2021)

External Conference Reviewer: ACM/IEEE Human Robot Interaction (2016)
WIPTTE (2015)
ACM Designing Interactive Systems (2014)
ACM Annual Symposium on Computer-Human Interaction in Play (2014)
ACM International Conference on Multimodal Interaction (2013, 2014)
ACM Interactive Tabletops and Surfaces (2010)
ACM SIGGRAPH ASIA (2009,2010)
ACM SIGGRAPH Sketches and Poster's Juror (2007)
Graphics Interface (2005, 2007, 2009, 2010, 2012, 2023)
Eurographics Workshop on Virtual Environments (2002, 2004, 2007)
ACM UIST (2003, 2005, 2006, 2008, 2010 – 2019, 2021, 2022, 2023)
ACM CHI (2005-2006, 2010-2025)

ACM Virtual Reality Software and Technology (2005, 2017)
ACM Intelligent User Interfaces (2013, 2018)
IEEE International Symposium on Wearable Computers (2010)
IEEE Virtual Reality (2005, 2012, 2017, 2020, 2022, 2023)
IEEE Visualization (2004, 2021)
ACM SIGGRAPH (2004, 2008, 2010, 2011, 2013, 2014, 2017-2019,
        2023)
ACM SIGGRAPH Asia (2023, 2024)
12th IEEE Mediterranean Conference on Control and Automation (2004)
IEEE and ACM International Symposium on Mixed and Augmented
Reality (2003, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2021-2023)
ACM Symposium on Interactive 3D Graphics (2003)
ACM SIGGRAPH courses (1999)

SERVICE TO UCF

Member, Faculty Search Committee, Knights Digital Twin Initiative, 2024-2025
Member, College RIA Review Committee, 2023-2025
Member, Department of Computer Science Executive Committee, 2018-2025
Member, Department of Computer Science Graduate Committee, 2020-2022
Chair, Faculty Search Committee, CS, 2019
Member, University Promotion and Tenure Committee, 2019-2020
Member, SOTL Review Committee, UCF, 2017
Member, Faculty Search Committee, Modeling and Simulation Graduate Program, 2016
Director, Modeling and Simulation Graduate Program, UCF, 2015-2018
Member, SOTL Review Committee, UCF, 2014
Member, TIP Criteria Committee, CECS, 2014
Member, Faculty Search Committee, EECS, 2013-2016, 2018
Member, EECS, Computer Science Division Executive Committee, 2013-2017
Member, EECS, Computer Science Division Website Committee, 2013
Member, Search Committee, Center for Research in Computer Vision, 2012
Member, Lecturer Promotion Committee, EECS, 2012
Member, Graduate Program Advisory Committee for the M&S Graduate Program, 2011-2012
Member, Industrial Advisory Committee, EECS, 2007-2009.
Member, Space Committee, EECS, 2008-2009.
Member, Faculty Search Committee, EECS 2009-2010.
Faculty, UCF EXCEL Program, 2009-2012

REFRENCES

Andries van Dam
Thomas J. Watson, Jr., University Professor of Technology and Education
and Professor of Computer Science
Brown University
Department of Computer Science, Box 1910
Providence, RI 02912
Phone: 1-401-863-7640
Email: avd@cs.brown.edu

John F. Hughes
Professor of Computer Science
Brown University
Department of Computer Science, Box 1910
Providence, RI 02912
Phone: 1-401-863-7638
Email: jfh@cs.brown.edu

David H. Laidlaw
Professor of Computer Science
Brown University
Department of Computer Science, Box 1910
Providence, RI 02912
Phone: 1-401-863-7647
Email: dhl@cs.brown.edu

Doug A. Bowman
Professor
Virginia Tech
Department of Computer Science
660 McBryde Hall
Blacksburg, VA 24061
Phone: 1-540-231-2058
Email: bowman@vt.edu

Issa Batarseh
Professor
Dept. of Electrical Engineering and Computer Science
University of Central Florida
Orlando, FL 32816-2362
Phone: 1-407-823-0185
Email: batarseh@eecs.ucf.edu

Michael Macedonia
AVP for Research
University of Central Florida
4000 Central Florida Blvd., MH 243
Orlando, FL 32816
Phone: 407-453-1551
Email: michael.macedonia@ucf.edu