Evren Bozgeyikli, PhD

Assistant Professor
School of Information
University of Arizona, Tucson, AZ
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Research Interests

Game Development
Virtual/Augmented/Mixed Reality
Human Computer Interaction
Mobile Applications
Algorithm Development
Artificial Intelligence

Education

Doctor of Philosophy in Computer Science and Engineering **2013 – 2016**
University of South Florida, Tampa, FL
Dissertation Title: "Locomotion in Virtual Reality for Room Scale Tracked Areas"
Committee: Dr. Andrew Raij (Co-advisor), Dr. Srinivas Katkoori (Co-advisor), Dr. Rajiv Dubey, Dr. Paul Rosen, Dr. Sriram Chellappan, Dr. Eleazar Vasquez

Master of Science in Game Technologies **2010 – 2012**
Middle East Technical University, Ankara, Turkey
Thesis Title: "Introducing Rolling Axis into Motion Controlled Gameplay using Microsoft Kinect,"
Committee: Dr. Veysi Isler (Advisor), Dr. Ugur Halici, Dr. Umut Durak, Dr. Huseyin Hacihabiboglu, Dr. Erdal Yilmaz

Bachelor of Science in Mechanical Engineering **2002 - 2008**
Middle East Technical University, Ankara, Turkey
Advisor: Dr. Huseyin Vural

Employment History

Assistant Professor **8/2017 - Present**
University of Arizona, School of Information, Tucson, AZ

Researcher **12/2016 – 8/2017**
Center for Assistive, Rehabilitation and Robotics Technologies
University of South Florida, Tampa, FL
Supervisor: Dr. Redwan Alqasemi

Research Assistant **8/2013 – 12/2016**
Center for Assistive, Rehabilitation and Robotics Technologies
University of South Florida, Tampa, FL
Supervisor: Dr. Redwan Alqasemi

Research Assistant **12/2010 – 8/2013**
METU Modeling and Simulation R&D Center
Middle East Technical University, Ankara, Turkey
Supervisor: Dr. Veysi Isler

Teaching Assistant **12/2010 – 8/2012**
METU Informatics Institute, Game Technologies
Middle East Technical University, Ankara, Turkey
Courses: Game Development Pipeline
Applied Parallel Programming on GPU

Refereed Publications

- **Evren Bozgeyikli**, Andrew Raij, Srinivas Katkoori, and Rajiv Dubey. Locomotion in virtual reality for room scale tracked areas. International Journal of Human-Computer Studies, 122, 38-49. 2019.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Srinivas Katkoori, Andrew Raij and Redwan Alqasemi. Effects of Virtual Reality Properties on User Experience of Individuals with Autism. ACM Transactions on Accessible Computing (TACCESS), 11(4), 22. 2018.

- **Evren Bozgeyikli**, Lal "Lila" Bozgeyikli, Redwan Alqasemi, Andrew Raij, Srinivas Katkoori, and Rajiv Dubey. Virtual Reality Interaction Techniques for Individuals with Autism Spectrum Disorder. In Proceedings of the 20th International Conference on Human-Computer Interaction (HCI International), Springer International Publishing AG. Part of Springer Nature, M. Antona and C. Stephanidis (Eds.): UAHCI 2018, LNCS 10908, pp. 58-77. 2018. doi: https://doi.org/10.1007/978-3-319-92052-8_6

- Lal "Lila" Bozgeyikli, **Evren Bozgeyikli**, Andoni Aguirrezabal, Redwan Alqasemi, Andrew Raij, Stephen Sundarrao, and Rajiv Dubey. Using Immersive Virtual Reality for Vocational Rehabilitation of Individuals with Physical Disabilities. In Proceedings of the 20th International Conference on Human-Computer Interaction (HCI International), Springer International Publishing AG. Part of Springer Nature, M. Antona and C. Stephanidis (Eds.): UAHCI 2018, LNCS 10908, pp. 48-57. 2018. doi: https://doi.org/10.1007/978-3-319-92052-8_5

- **Evren Bozgeyikli**. VRTouched: Towards Exploring Effects of Tactile Communication with Virtual Robots on User Experience in Virtual Reality. The IEEE International Conference on Robotics and Automation (ICRA), Workshop on Active Touch for Perception and Interaction: How Nature Inspires Robotics. 2018.

- Rubein Shaikh, Paul Mattioli, Katey Corbett, Lal "Lila" Bozgeyikli, **Evren Bozgeyikli**, and Redwan Alqasemi. The Portable VR4VR: A Virtual Reality System for Vocational Rehabilitation. The IEEE International Conference on Robotics and Automation (ICRA), Workshop on Robotics in Virtual Reality, Brisbane, Australia. 2018.

- **Evren Bozgeyikli**. Locomotion in Virtual Reality Video Games. In the Encyclopedia of Computer Graphics and Games of Springer. 2018.

- Lal Bozgeyikli, **Evren Bozgeyikli**. Immersive Virtual Reality Serious Games. In the Encyclopedia of Computer Graphics and Games of Springer. 2018.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Andrew Raij, Redwan Alqasemi, Srinivas Katkoori, and Rajiv Dubey. Vocational Rehabilitation of Individuals with Autism Spectrum Disorder with Virtual Reality. ACM Transactions on Accessible Computing (TACCESS), 10(2), 5. 2017.

- **Evren Bozgeyikli**, Lal Bozgeyikli, Andoni Aguirrezabal, Redwan Alqasemi, Stephen Sundarrao, Rajiv Dubey. Vocational Rehabilitation of Individuals with Disabilities Using Virtual Reality. In Proceedings of the Florida Conference on Recent Advances in Robotics (FCRAR) Boca Raton, FL. 2017.

- **Evren Bozgeyikli**. Locomotion in Virtual Reality for Room Scale Tracked Areas. Doctoral Dissertation. 2016.

- **Evren Bozgeyikli**, Andrew Raij, Srinivas Katkoori, and Rajiv Dubey. Point & Teleport: A Noteworthy Locomotion Technique for Virtual Reality. ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play (CHI PLAY), Austin, TX. 2016.

- **Evren Bozgeyikli**, Andrew Raij, Srinivas Katkoori, and Rajiv Dubey. Locomotion in Virtual Reality for Individuals with Autism Spectrum Disorder. ACM Spatial User Interaction Conference (SUI), Tokyo, Japan. 2016.

- **Evren Bozgeyikli**, Lal Bozgeyikli, Andrew Raij, Srinivas Katkoori, Redwan Alqasemi, and Rajiv Dubey. Virtual Reality Interaction Techniques for Individuals with Autism Spectrum Disorder: Design Considerations and Preliminary Results. HCI International Conference. 2016 Human-Computer Interaction. Interaction Platforms and Techniques Book Chapter, Volume 9732 pp 127- 137. Springer. 2016.

- **Evren Bozgeyikli**, Lal Bozgeyikli, Andoni Aguirrezabal, Redwan Alqasemi, and Rajiv Dubey. VR4VR An Immersive Virtual Reality Vocational Rehabilitation. IEEE Engineering in Medicine and Biology Society (EMBS) Conference, Orlando, FL. 2016.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Andoni Aguirrezabal, Redwan Alqasemi, Stephen Sundarrao, and Rajiv Dubey. Immersive Virtual Reality for Vocational Rehabilitation of Individuals with Disabilities. Rehabilitation Engineering and Assistive Technology Society of North America Assistive Technology Collaborative Conference (RESNA), Arlington, VA. 2016.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Andrew Raij, Redwan Alqasemi, Srinivas Katkoori, and Rajiv Dubey. Vocational Training with Immersive Virtual Reality for Individuals with Autism: Towards Better Design Practices. Workshop on Everyday Virtual Reality at IEEE Virtual Reality, Greenville, SC. 2016.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Matthew Clevenger, Andrew Raij, Redwan Alqasemi, Stephen Sundarrao, and Rajiv Dubey. VR4VR: vocational rehabilitation of individuals with disabilities in immersive virtual reality environments. In Proceedings of the 8th ACM International Conference on PErvasive Technologies Related to Assistive Environments (PETRA '15). ACM, New York, NY, USA, Article 54, 4 pages. 2015.

- **Evren Bozgeyikli**, Lal Bozgeyikli, Matthew Clevenger, Andrew Raij, Redwan Alqasemi, Stephen Sundarrao, and Rajiv Dubey. VR4VR: Vocational Rehabilitation of Individuals with Disabilities in Immersive Virtual Reality Environments. In Proceedings of the Florida Conference on Recent Advances in Robotics (FCRAR), Melbourne, FL. 2015.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Andrew Raij. Keep Brushing! Developing Healthy Oral Hygiene Habits in Young Children with an Interactive Toothbrush, In Proceedings of EURASIA GRAPHICS International Conference on Computer Graphics, Animation and Gaming Technologies. 2014.

- **Evren Bozgeyikli**, Lal Bozgeyikli, Matthew Clevenger, Andrew Raij, Redwan Alqasemi, Stephen Sundarrao, and Rajiv Dubey. Design and Development of a Virtual Reality System for Vocational Rehabilitation of Individuals with Disabilities. In Proceedings of IEEE Symposium on 3D User Interfaces (3DUI), Minneapolis, MN. 2014.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Matthew Clevenger, Shangdong Gong, Andrew Raij, Redwan Alqasemi, Stephen Sundarrao, and Rajiv Dubey. VR4VR: Towards Vocational Rehabilitation of Individuals with Disabilities in Immersive Virtual Reality Environments. In Proceedings of Workshop on Virtual and Augmented Assistive Technologies (VAAT) at IEEE Virtual Reality, Minneapolis, MN. 2014.

- Lal Bozgeyikli, **Evren Bozgeyikli**, and Veysi Isler. Introducing Tangible Objects into Motion Controlled Gameplay Using Microsoft Kinect. In Proceedings of 26th International Conference on Computer Animation and Social Agents (CASA). 2013.

- Lal Bozgeyikli, **Evren Bozgeyikli**, and Veysi Isler. Introducing Tangible Objects into Motion Controlled Gameplay Using Microsoft Kinect. Journal Computer Animation and Virtual Worlds (CAVW), John Wiley. 2013.

- **Evren Bozgeyikli**. Introducing Rolling Axis into Motion Controlled Gameplay as a New Degree of Freedom Using Microsoft Kinect. Master of Science Thesis. 2012.

Non-refereed Publications/Presentations/Demonstrations

- **Evren Bozgeyikli**, Srinivas Katkoori, Andrew Raij, Redwan Alqasemi, and Rajiv Dubey. Evaluating Virtual Reality Locomotion Techniques for Individuals with Autism Spectrum Disorder. In Proceedings of the USF 8th Annual Graduate Student Research Symposium. 2016.

- **Evren Bozgeyikli**, Lal Bozgeyikli, Redwan Alqasemi, Andrew Raij, Stephen Sundarrao, and Rajiv Dubey. Evaluation of Various Virtual Reality Interaction Techniques for Individuals with Autism Spectrum Disorder. In Proceedings of the USF College of Engineering Research Day, USF Office of Research & Innovation. 2015.

- Lal Bozgeyikli, **Evren Bozgeyikli**, Redwan Alqasemi, Andrew Raij, Stephen Sundarrao, and Rajiv Dubey. Vocational Rehabilitation of Individuals with Autism Spectrum Disorder Using Virtual Reality. In Proceedings of the USF College of Engineering Research Day, USF Office of Research & Innovation. 2015.

- **Evren Bozgeyikli**, Lal Bozgeyikli, Matthew Clevenger, Andrew Raij, Redwan Alqasemi, and Rajiv Dubey. A Virtual Reality System for Vocational Rehabilitation of Individuals with Disabilities. In Proceedings of the USF College of Engineering Research Day, USF Office of Research & Innovation. 2014.

Forthcoming Books

- Lal Bozgeyikli, **Evren Bozgeyikli**, (eds.). Virtual Reality: Recent Advancements, Applications and Challenges. River Publishers. To be published in 2019.

Teaching Experience

Algorithms for Games Fall 2018, Spring 2019
University of Arizona, School of Information

Game Development Fall 2017, Spring 2018, Spring 2019
University of Arizona, School of Information

Game Development Pipeline (Teaching Assistant) Fall 2011, Fall 2012
Middle East Technical University

Applied Parallel Programming on GPU (Teaching Assistant) Spring 2012
Middle East Technical University

Grants

The Social and Behavioral Sciences Research Institute (SBSRI) 12/2018 - Present
Faculty Small Grant (PI, $3,500)
University of Arizona, Tucson, AZ
Using Real-Life Objects as Display Extensions through Projection Mapping

Research Projects

Tangiball 2018
A Tangible Virtual Reality Ball Game

VR4VR 2013 - 2017
Virtual Reality for Vocational Rehabilitation
VR System Design, Development and Evaluation

Games and Applications 2012 - Present
Design, Development and Evaluation
Extended Reality, Mobile, Computer-Based

Trainings/Workshops Completed

Research

RDS Proposal Development Workshop	10/2018
NSF CAREER Preparation Program	9/2018
Competing for Funding from the NSF Workshop	9/2018
How to Write Successful Proposals for NSF CAREER, DoD Young Investigator, and Other Early Career Programs Workshop	9/2018
Grant Writing Workshop	2/2018
NSF Career: Introduction & Recipients Panel	11/2017

Teaching

Course Level Assessment Mini-Course	8/2018
Reimagining Slides Mini-Course	8/2018
Course Development Online Mini-Course	8/2018

Other

ASUA Recognized Clubs - Club Advisor Training	1/2019
Information Security Awareness Training	10/2017
FERPA Tutorial Training	10/2017

Service to the Research Community

Committee Member/Publications Co-Chair
ACM International Conference on Tangible, Embedded and Embodied Interactions (TEI) 2019 — 9/2017 - Present

Technical-Computer Graphics Committee Member
IEEE International Conference on Virtual Worlds and Games for Serious Applications (VS Games) 2019 — 9/2018 – Present

Co-Editor
Virtual Reality: Recent Advancements, Applications and Challenges. To Be Published in 2019. River Publishers. — 5/ 2018 - Present

International Program Committee Member
IEEE International Conference on Virtual Worlds and Games for Serious Applications (VS Games) 2018 — 9/2017 – 9/2018

Co-Chair
Virtual Reality Video Games Parallel Session HCI International Conference 2018 — 9/2017 - 8/2018

The IEEE International Conference on Robotics and Automation Workshop on Robotics in Virtual Reality — 11/2017 - 6/2018

Technical Committee Member
International Eurasia Graphics Conference Ankara, Turkey — 2014

Research Group Member
Computer Graphics and Visualization Research Group, Middle East Technical University, Ankara, Turkey — 2010 - 2013

Game Technologies Research (GATER) Lab Research Group, Middle East Technical University, Ankara, Turkey — 2010 - 2013

Invited Talks/Exhibitions/Workshops/Presentations
Locomotion in Virtual Reality
IT Summit, Teaching & Learning Presentations, AZ — 2018

Tangiball: A Tangible Virtual Reality Ball Game
IT Summit, AZ — 11/2018

AP Research Student Visit Workshop 2017, 2018
School of Information, Tucson, AZ

Playful Interactive Technologies 4/2018
College of Social and Behavioral Sciences Magellan Circle Reception
Tucson, AZ

Faculty Research Blitz 2/2018
School of Information, Tucson, AZ

University of South Florida's Engineering Expo, 2014, 2015, 2016
Tampa, FL

Game Development with Unity 2013
Middle East Technical University, Ankara, Turkey

Towards Better User Experience in Video Games with Microsoft Kinect 2013
Istanbul Technical University, Istanbul, Turkey

Developing a Game from Scratch with Unity 2012
Isik University, Istanbul, Turkey

Middle East Technical University's Science is Fun at METU Expo 2011, 2012, 2013
Ankara, Turkey

Certificate Program Course Series
Game Development (Primary Instructor) 2013
Middle East Technical University, Continuing Education Center, Ankara, Turkey

Organizer
IEEE Signal Processing Society Summer School on Game Audio 2012
Ankara, Turkey

Crystal Pixel National Video Game Industry Awards 2012
Ankara, Turkey

Local Game Jam Site Organizer 2012
The 29th National Informatics Convention of Turkish Informatics Association
Ankara, Turkey

Global Game Jam Site 2011, 2012
Middle East Technical University, Ankara, Turkey

GATEWay Student Video Game Showcase 2011, 2012
Middle East Technical University, Ankara, Turkey

Reviewer
IEEE VR 2019 Conference 9/2018 – 1/2019
ACM SIGCHI Annual Symposium on 08/2018 - 10/2018
Computer-Human Interaction in Play (CHI PLAY)
International Journal of Human-Computer Studies, Elsevier 9/2017 - Present
Virtual Reality Journal, Springer 9/2017 - Present
Human Computer Interaction, Taylor and Francis 9/2017 - Present

Service to the University

University of Arizona
Department Research Committee 8/2018 - Present
School of Information, University of Arizona, Tucson, AZ

Student Club Academic Advisor 1/2019 - Present
UA Video Game Developers Club, University of Arizona, Tucson, AZ

IT Summit AR/VR Committee 8/2018 - 11/2018
University of Arizona, Tucson, AZ

HackFest Challenge Supervisor 8/2018 - 11/2018

Data Visualization Hiring Committee Member 10/2017 - 5/2018
School of Information, University of Arizona, Tucson, AZ

Graduate Committee 8/2017 - 8/2018
School of Information, University of Arizona, Tucson, AZ

Honors and Awards

USF Engineering Alumni Society Travel Grant Award 2014, 2016
University of South Florida, Tampa, FL

Student Government Conference Presentation Grant 2014, 2016
University of South Florida, Tampa, FL

Best Dissertation/Thesis Award 2013
Introducing Rolling Axis into Motion Controlled Gameplay using Microsoft Kinect,
Middle East Technical University, Ankara, Turkey

Graduate Student Performance Award 2012
GPA: 4.00, Middle East Technical University, Ankara, Turkey

Mentoring

PhD Committee

Michael Jenkins 5/2018 - 12/2018
School of Information, University of Arizona

Independent Study

Amit Sen, Bachelor of Science, 8/2017 - 12/2017
School of Information, University of Arizona

Capstone Projects

Alejandro Romero, Bachelor of Science, 9/2018 - 12/2018
School of Information, University of Arizona

Edward Trujillo, Bachelor of Science, 9/2017 - 12/2017
School of Information, University of Arizona

Frederick Pang, Bachelor of Science, 9/2017 - 12/2017
School of Information, University of Arizona

Other Mentoring

Game Technologies Research (GATER) Lab Internship Supervisor 7/2012 - 9/2012

Affiliations/Memberships

ACM (Association for Computing Machinery)
IEEE (Institute of Electrical and Electronics Engineers)
IGDA (The International Game Developers Association)