Jerald Thomas

Computer Science Ph.D. Candidate

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Education

University of Minnesota — *Minneapolis, MN*

Doctorate of Philosophy in Computer Science — *May 2020*

Advisor: Dr. Evan Suma Rosenberg

University of Southern California — *Los Angeles, CA*

Masters of Science in Computer Science — *May 2018*

Advisor: Dr. Evan Suma Rosenberg

University of Minnesota, Duluth — *Duluth, MN*

Bachelors of Science in Electrical and Computer Engineering — *May 2015*

Advisor: Dr. Stan Burns

Publications

Refereed Conference Papers

Same task, different place: Developing novel simulation environments with equivalent task difficulties — *July 2019*

B.T. Files, A.H. Oiknine, J. Thomas, P. Khooshabeh, A.M. Sinatra, K.A. Pollard

Conference on Applied Human Factors and Ergonomics

A General Reactive Algorithm for Redirected Walking using Artificial Potential Functions — *March 2019*

J. Thomas, E.S. Rosenberg

IEEE Conference on Virtual Reality and 3D User Interfaces

Assessing the quantitative and qualitative effects of using mixed reality for operational decision making — *November 2018*

M. Dennison, J. Thomas, T.T. Trout, E.S. Rosenberg

International Command and Control Research and Technology Symposium

Effects of Personalized Avatar Texture Fidelity on Identity Recognition in Virtual Reality — *November 2017*

J. Thomas, M. Azmandian, S. Grunwald, D. Le, D. Krum, S. Kang, E. Suma Rosenberg

ACM Conference on Artificial Reality and Telexistence and the 22nd Eurographics Symposium on Virtual Environments

Revisiting detection thresholds for redirected walking: combining translation and curvature gains — *July 2016*

T. Grechkin, J. Thomas, M. Azmandian, M. Bolas, E. Suma

ACM Symposium on Applied Perception

Non-refereed Conference Papers

Collaborative mixed reality (MxR) and networked decision making — *April 2018*

T. Trout, S. Russel, A. Harrison, R.Spicer, E.S. Rosenberg, and J. Thomas

SPIE Next Generation Analyst VI

Refereed Conference Poster Presentations

Strafing Gain: A Novel Redirected Walking Technique *October 2019*

C. You, E.S. Rosenberg, J. Thomas

ACM Symposium on Spatial User Interfaces (to appear)

MuVR: A Multi-user Virtual Reality Platform *March 2014*

J. Thomas, R. Bashyal, S. Goldstein, E. Suma

IEEE Conference on Virtual Reality

Effectiveness of commodity BCI devices as means to control an immersive virtual environment *July 2013*

J. Thomas, S. Jungst, and P. Willemsen

ACM Symposium on Spatial User Interfaces

Doctoral Consortium

Leveraging Configuration Spaces and Navigation Functions for Redirected Walking *March 2018*

J. Thomas

IEEE Conference on Virtual Reality and 3D User Interfaces

Experience

University of Minnesota *Minneapolis, MN*

Graduate Research Assistant *August 2018 to Present*

- Help design, implement, and run user studies
- Assist with supervision and mentorship of undergraduate and masters level lab members

University of Southern California *Los Angeles, CA*

Teaching Assistant *August 2016 to December 2016*

- Helped students with class work
- Led lab sections

University of Southern California *Los Angeles, CA*

Graduate Research Assistant *August 2015 to August 2018*

- Helped design, implement, and run user studies
- Assisted with lab demonstrations

Sony Interactive Entertainment America | Play Station *San Mateo, CA*

Summer Intern *Summer 2016*

- Worked within the R&D Magic Lab group to prototype novel user interactions
- Filled many roles including 3D printed design, asset design, and game design

USC Institute for Creative Technologies *Los Angeles, CA*

Summer Intern *Summer 2015*

- Created mobile VR platform for use at SIGGRAPH Emerging Technologies exhibit
- Converted existing redirected walking demo to be used with mobile platform
- Ran demonstrations at SIGGRAPH Emerging Technologies exhibit
- Helped design and implement two user studies

USC Institute for Creative Technologies *Los Angeles, CA*

Summer REU Intern *Summer 2013*

- Co-created MuVR (Multi-user Virtual Reality) platform
- Lead hardware integration and networking efforts
- Created basic game assets

University of Minnesota, Duluth — *Duluth, MN*

Undergraduate Research Assistant — *September 2012 to May 2014*

- Contributed to the development of Quic Energy, an urban radiation simulation project
- Helped parallelize project using Nvidia architecture
- Introduced new features with personal research interests in mind

UMD Department of Electrical and Computer Engineering — *Duluth, MN*

Lab Coordinator Assistant — *September 2011 to May 2015*

- Maintained department computer systems, labs, and lab equipment
- Assisted professors and students with technical issues when needed
- Administrated department Cadence system

Public Service

Local Arrangements Chair — *Minneapolis, MN*

ACM Conference on User Interface Systems and Technology — *October 2020*

Streaming and Communications Chair — *Atlanta, GA*

IEEE Conference on Virtual Reality and 3D User Interfaces — *March 2020*

Student Volunteer Chair — *Osaka, Japan*

IEEE Conference on Virtual Reality and 3D User Interfaces — *March 2019*

Student Volunteer — *Reutlingen, Germany*

IEEE Conference on Virtual Reality and 3D User Interfaces — *March 2018*

Student Volunteer — *Los Angeles, CA*

IEEE Conference on Virtual Reality and 3D User Interfaces — *March 2017*

FIRST Regional Referee — *Duluth, MN*

Duluth FIRST Regional Competition — *March 2015*

FIRST Mentor — *Duluth, MN*

Denfeld High School — *August 2011 to March 2015*

Electrical Engineering Summer Camp Volunteer — *Duluth, MN*

UMD EE Summer Camp — *Summer 2014*

FIRST Regional Referee — *Duluth, MN*

Duluth FIRST Regional Competition — *March 2014*

Electrical Engineering Summer Camp Volunteer — *Duluth, MN*

UMD EE Summer Camp — *Summer 2012*

FIRST Mentor — *Nevis, MN*

Nevis High School — *August 2009 to March 2011*