

# Timothy Joseph Rogers

## Mission Statement:

“To organize the world’s presentational environments using synchronous geospatial mixed reality techniques.”

## Education

### **Purdue University**

**West Lafayette, Indiana, USA**

Master of Science, 2005; Purdue Computer Graphics Technology

### **University of Washington**

**Seattle, Washington, USA**

Bachelor of Arts, 1998; UW School of Drama

## Summary of Research Interests and Activities

The central thread of my research agenda—advanced, real time, presentational environments—began while studying scenic theory and theatre history at the University of Washington School of Drama. The architecture and conventions of the theatrical stage can be understood as an “interface” for experiencing complex, 3-dimensional, visuospatial information in real time. It is the shared relationship between the audience (viewers) and the stage (viewed) that is at the heart of the matter. For well over a decade, interactive multimedia, mobile mixed reality, and location-based services/devices have matured to enable powerful new forms of human-computer interactions—including augmented environments and mirror worlds. These computer-graphics based techniques generate the illusion that virtual geometry and CG effects are no longer constrained to the frame of a computer display and can appear to “co-exist” in the physical spaces that we inhabit.

My interests are particularly focused on how these new computer graphics techniques can be leveraged in *augmented presentational environments* such as performance spaces, classroom/lecture halls, meeting rooms, sporting venues, etc. I believe that the intersection of these emerging interactive techniques with theatrical/presentational traditions will provide fertile opportunities for emergent forms of teaching, learning, entertainment, and novel experiences.

## Publications

Matei, Sorin A. (2010). [Jules Verne’s Around the World in 80 Days: The Ubitour Version Guided by your Mobile Phone](#). CreateSpace Independent Publishing Platform. Interactive maps and QR codes created and linked through a database integrated into a wordpress dashboard. [[Book on Amazon.com](#)]

Rogers, T.J., Flaherty M. P. (2007). *Perspective and Visual Architectures in the Sign Engine Theatre*. Semiotic Society of America, New Orleans, LA.

Rogers, T.J., Benes, B., Bertoline, G. (2006). [Towards a Modular Network-Distributed Mixed-Reality Learning Space System](#). International Symposium on Visual Computing (ISVC) 2006: 637-646, Lake Tahoe, NV.

Zhong, X., Chan, H., Rogers, T. J., Rosenberg, C., & Coyle, E. J. (2006, March 1-3). [The Development and eStadium Testbeds for Research and Development of Wireless Services for Large-scale Sports Venues](#). Paper presented at the 2nd Int’l IEEE/Create-Net TridentCom Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities, Barcelona, Spain.

Zhong, X., Chan, H.-H., Rogers, T. J., Rosenberg, C., & Coyle, E. (2006). [eStadium – The “Living Lab”](#). Paper presented at the IEEE INFOCOM 2006 (Poster and Demo Session Program—Network Monitoring, Measurement and Analysis), Barcelona, Spain.

Rogers, T.J., 2006. *Presenting Multiple Networked Performance Frames*. Proceedings of the 2006 International Conference on Information Society ([i-Society 2006](#)), Miami, FL. [Presented with Innovative Award]

Glotzbach, R.J., Bingham, N.S., Ren, M., & Rogers, T.J. (2006). *E-Stadium: Mobile infotainment applications*. Proceedings of the 10th World Multi-Conference on Systemics, Cybernetics, and Informatics.

Rogers, T.J., Flaherty M. P. (2006) [Towards a Sign-Engine Theatre: Icons, Agency, and Identity for Networked Cultures](#). Semiotic Society of America, Purdue University.

Nichols, C., Deal, S., Rogers, T.J., Miklavcic, J., Miklavcic, B., Ayromlou, M., Wachtel, R., Mercer, P., Humbert, J., King, R. (2006). [Musical Performance over Internet2 using the AccessGrid](#). International Computer Music Conference, Tulane University, New Orleans, LA.

Rosenberg, C., Chan, H.-H., Rogers, T.J., Mhatre, V.P. (2005) [e-Stadium: Wireless Applications in a College Football Stadium](#).

Meador, W. S., Rogers, T. J., O'Neal, K., Kurt, E., and Cunningham, C. 2004. [Mixing dance realities: Collaborative development of live-motion capture in a performing arts environment](#). ACM Computers in Entertainment (CIE), 2(2), 1-15.

Google Scholar Profile for [Timothy J. Rogers](#)

## Work Experience

Intl. Alliance of Theatrical Stage Employees, IATSE Local 15 Seattle, WA (March 2014-Present) – *Currently on call-list for IATSE Local 15 (Permit Worker), and for the City of Seattle (City Card: Intermittent Stage Technician)*.

Seattle Theatre Group (STG), Seattle, WA (July 2013-Present) – *Currently on call-list for the Moore & Neptune Theatres*.

[Electric Vehicle Initiative](#) at Purdue University's School of Chemical Engineering (July, 2010 - August, 2012) -- *Managed the publishing of all course content related to the Electric Vehicle Initiative using the HUBzero platform (content management system) for scientific collaboration. Produced full course modules for faculty involved with EV Initiative. Social Media account manager and recruiter. Webmaster & Database admin for the Electric Vehicle Grand Prix website ([evGrandPrix.org](#)) including all evGrandPrix event graphics/posters/badges/images/videos/etc. Worked directly with Project Management on event promotions as well as led all videography.*

Purdue University nanoHUB (January 2012 - July, 2012) -- *Online Presentation Production for Purdue nanoHUB-U. [Classroom video capture](#) of several nanoHUB-U courses.*

[Envision Center](#) for Data Perceptualization at Purdue University (2004 - 2008) – *Research Assistant, Motion Capture System Operator/Trainer/Support (STT & Autodesk Motion Builder), AccessGrid Node Operator, Video Production, Poster Design.*

[Purdue eStadium Project](#), (2004-2007) – *Video Production Manager/Lead/Trainer. Developed and implemented video pipeline between network servers and stadium video production team.*

IEEE Supercomputing SC|06, Tampa, FL (November, 2006) — HPC (High Performance Computing) [Education Program](#). *Committee Support and Technical Support/Design for SC HPC Education Booth. Gave a short course on how to use Google SketchUp & Google Earth to create Mirror World models and resources for educators.*

SIGGRAPH 06', Boston, MA, (2006) – *Technical Support for Purdue Presentation Booth.*

TeraGrid 06', Indianapolis, IN (June, 2006) – *Technical Support for Session Presenters.*

IEEE Supercomputing, SC|05, Gateway to Discovery. Seattle, WA. (2005) — [SC Education Outreach](#). *Committee Support & Education Outreach Booth Technical Support.*

Purdue International Center for Entertainment Technology (PICET), Department of Computer Graphics Technology (2002-2003) – *Administrative Assistant.*

Elliot Hall of Music, Purdue University (2001-2012) – *Ross-Ade Game Day Camera Operator, Professional Stagehand, & Special Event Services.*

University District Annual [Fool's Day Pageant](#), Seattle, WA (1996-2001) – *Originator, Producer, Director, [Master of Ceremonies](#).*

Conferences,  
Competitions,  
Posters & Awards

Intl. Alliance of Theatrical Stage Employees, IATSE Local 15 Seattle, WA (1998-2001)  
–*Professional Stagehand on hundreds of events in all major venues in greater Seattle area.*

University of Washington School of Drama (1995-1998) – *Involved in a number of UW School of Drama productions in a variety of roles including: assistant director, assistant stage manager, 12-unit slide projection system programmer, and actor.*

[[Workshop](#)] ACT - A Contemporary Theatre, Seattle WA. Feb 11, 2014 -- The Ultimate Stage & Mirror World Theatre. A [presentation](#) and workshop following up on the presentation I gave at ACT in October of 2013 (below). The workshop included a live Google Earth flythrough and model of some basic components in the Allen Theatre.

[[Presentation](#)] ACT - A Contemporary Theatre, Seattle WA. October 3, 2013 -- *All the World's an Ultimate Stage: Mirror Worlds & Sign Engines*. A [presentation on Mirror Worlds, Mixed Reality Performance](#), and introducing [Augmented Arena Architecture](#) constructs.

[[Presentation](#)] University of San Diego, CA. May 1st, 2012 --*When Worlds Coincide: Mirror World Interfaces*.

[[Presentation](#)] The Black Sparrow, Lafayette, IN. Oct 26th, 2011 --*Homuncular Vision: Mirror Worlds & Frame Lasers in Academia & Entertainment (Part 1: Background & Vision)*

[Poster] 2009 Graduate Student Educational Research Symposium –*Theoretical Framework for a Prism-based Media Display: Principles and Applications*.

[[Presentation](#)] Semiotic Society of America. 2007 Annual Meeting: "Semiotics and Survival" -- New Orleans, LA. --[Perspective and Visual Architectures in the Sign Engine Theatre](#).

[[Project Team Leader](#)] Google Build Your Campus in 3D Competition, Mountain View, CA, (August, 2007) – Led winning team in competition. All [Purdue Campus models](#) were added to public Google Earth Layer. Team won a 3-day trip to the Googleplex for workshops and fun.

[[Presentation](#)] Grand Valley State University, Feb 16th, 2007. Computer Graphics Seminar -- *Towards Mixed-Reality Cyber-Campus Community Systems*.

[Session Chair / [Presentation](#)] Semiotic Society of America. 2006 Annual Meeting: "The Future of Semiotics" – Purdue University, West Lafayette, IN. [Session](#): "Sign Engines"--*Towards a Sign-Engine Theatre: Icons, Agency, and Identity for Networked Cultures*.

[Poster] 2006 Purdue Faculty Convocation Poster Session – *Towards a Modular Network-Distributed Mixed-Reality Learning Space System*.

[Innovative Award / Paper Presentation] Rogers, T. J. (2006). *Presenting Multiple Networked Performance Frames*. Paper presented at the International Conference on Information Society (i-Society), Miami, Florida.

[Session Chair / [Presentation](#)] IEEE Supercomputing, Seattle, WA. (2005) — SC|05 SCGlobal Showcase: "Collaborative Art" -- Session Chair/Speaker. *Interplay: Loose Minds in a Box*. (Motion capture artist).

[[Presentation](#)] SIGGRAPH, Los Angeles, CA, 2005 — Emerging Technologies - *InterPlay: Loose Minds in a Box*, a Collaborative Global Distributed Live Performance. (Motion capture artist).

[[Presentation](#)] Prague Quadrennial, Prague, Czech Republic, 2003 — Scenofest Presentation: *A Lear for Our Times*. ([Video & Animation designer](#), [Website designer](#)).

## **AWARDS**

Recipient of the 2008-09 Bilisland Dissertation Fellowship from Purdue University Graduate School.