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| Contact Information | University of Wisconsin – Stout 207 Jarvis Hall Science Wing P.O. Box 790 Menomonie, WI 54751-0790 USA | <i>Mobile:</i> +1-715-231-5009 <i>Office:</i> +1-715-575-1771 <i>Fax:</i> +1-715-232-2573 <i>E-mail:</i> berriers@uwstout.edu |
| Research Interests | Material appearance capture and manipulation via light field rendering and computational photography. Pop-up capture of shape and appearance as well as simplified capture and processing of motion. Music analysis and visualization. | |
| Education | University of Minnesota , Minneapolis, Minnesota USA Ph.D., Computer Science, August 2012 <ul style="list-style-type: none">• Thesis: <i>Digital Material Samples for Design</i>• Adviser: Professor Gary Meyer• Area of Study: Computer Graphics M.S., Computer Science, May 2006 <ul style="list-style-type: none">• Adviser: Professor Gary Meyer• Coursework based masters• Area of Study: Computer Graphics• Minor in Mathematics Butler University , Indianapolis, Indiana USA B.A., Music, August 2002 <ul style="list-style-type: none">• Area of Study: Vocal Performance• Dual Degree Program: Computer Science (unofficial) | |
| Ph.D. Thesis | Seth Berrier. <i>Digital Material Samples for Design</i> . PhD thesis, University of Minnesota, Minneapolis, MN, August 2012. | |
| Journal Articles | Michael Ludwig, Seth Berrier, Michael Tetzlaff, and Gary Meyer. 3d shape and texture morphing using 2d projection and reconstruction. <i>Computers & Graphics</i> , 51:146 – 156, May 2015. International Conference Shape Modeling International. | |
| Conference Publications | Seth Berrier, Michael Tetzlaff, Michael Ludwig, and Gary Meyer. Improved appearance rendering for photogrammetrically acquired 3d models. In <i>2015 Digital Heritage</i> , volume 1, pages 255–262, Sept 2015. Seth Berrier, Gary Meyer, and Danny Rado. A 3d interface for selecting household paint colors. In <i>Proceedings of the 19th Color and Imaging Conference (CIC)</i> , pages 160–165. Society for Imaging Science and Technology, 2011. Seth Berrier, Gary Meyer, and Clement Shimizu. A computer graphics system for examining paint color collections. In <i>Proceedings of the 11th Congress of the International Colour Association (AIC)</i> , Sydney, 2009. Colour Society of Australia. | |

Seth Berrier, Gary Meyer, and Clement Shimizu. Creating metallic color sequences for an architectural wall. In *Proceedings of the 28th Annual Conference of the Association for Computer Aided Design in Architecture (ACADIA)*, pages 308–313, 2008.

Seth Berrier, Clement Shimizu, Patrick Chong, D’nardo Colucci, and Gary Meyer. The wall of inspiration: A computer aided color selection system. In *Proceedings of the 4th European Conference on Colour in Graphics, Imaging, and Vision (CGIV)*, pages 132–137. Society for Imaging Science and Technology, 2008.

Panagiotis K. Linos, Zhi hong Chen, Seth Berrier, and Brian O’Rourke. A tool for understanding multi-language program dependencies. In *Proceedings of the 11th IEEE International Workshop on Program Comprehension (WPC)*, pages 64–72, May 2003.

Awards

University of Minnesota

- Inventor Recognition Award - License Signed, 2008

Other Graduate Level Awards

- Selected as Google Summer of Code participant, 2009
- Intelligent Ground Vehicle Competition, 2006, Part of 2nd place team (4th overall)

Butler University

- Outstanding Ensemble Member, Madrigal Singers, 2001
- Outstanding Ensemble Member, Jordan Jazz, 1999 & 2000
- University Scholarship 1998–2002

Professional Development

Grants

Professional Development Grant *Spring, 2016*
Support to attend Game Developers Conference *San Francisco, CA*
\$3,000 Awarded by University of Wisconsin Stout

Just-in-time Prof. Dev. Grant *Spring, 2015*
Support to attend & present at Shape Modeling International *Lille, France*
\$1,000 Awarded by University of Wisconsin Stout

Conferences & Workshops

Attended & Presented at Digital Heritage International *Fall, 2015*
Conference in Granada, Spain

Attended Game Design and Development *Spring, 2015*
Conference in San Francisco, CA

Participated in the ABET Program *September, 2012*
Assessment Workshop in Milwaukee, WI

Participant in New Instructor Workshop organized *August, 2012*
by the Nakatani Teaching and Learning Center

Teaching
Experience

University of Wisconsin – Stout, Menomonie, Wisconsin USA

Associate Professor

August 2016 – Present

CS 144: Computer Science 1 **F16**
CS 343: Math. Foundations of Computer Graphics **F16**

Assistant Professor

August 2012 – July 2016

CS 141: Intro. to Programming **F13, W14, SU14**
CS 144: Computer Science 1 **F12, S13, F14, F15**
CS 145: Computer Science 2 **S13, S14, S15, S16**
CS 248: Web and Internet Programming **W15, SU15, SU16**
CS 343: Math. Foundations of Computer Graphics **F12, F13, F14, F15**
CS 448: Software Engineering **F13, F14, S15, F15**
CS 458: Adv. Software Engineering **S14, S15, S16**
GDD 499: Game Design Independent Study **F14, F15, S16**
MATH 118: Concepts of Mathematics **SU13**

University of Minnesota, Minneapolis, Minnesota USA

Teaching Assistant

August 2003 – May 2010

Equipment
Grants

(Submitted) NSF Major Research Instrumentation **Spring '15 & '16**

- Title: MRI: Acquisition of a 3d photogrammetry light stage system for scanning shape, motion and appearance
- Funding: \$362,901 requested
- Outcome: First proposal (Jan '15) was not funded but received favorable reviews, revised & resubmitted Jan '16

Research
Grants

UW Stout College of STEM Small Grant **Summer 2014**

- Title: Appearance Capture in the Digital Content Creation Pipeline
- Funding: \$3,000 provided internally by College of STEM
- Outcome: Disseminated at math colloquium and in several courses, Fall 2014
- Outcome: Developed and submitted NSF MRI grant proposal, Spring 2015

Released
Software

ULF Renderer (*in beta testing*) **Summer 2015**
Sponsor: Cultural Heritage Imaging (<http://culturalheritageimaging.org>)

- Tool for rendering photogrammetry objects as light fields
- Directly reads models produced by Agisoft PhotoScan
- Key tool for working with the NSF MRI grant equipment
- Project Site: <https://sites.google.com/site/ulfrenderer/>

PhotoScan Helper (*in development*) **Summer 2015**

- Tool to help manage photos and objects for processing with Agisoft PhotoScan
- Key part of the summer scanning project with the UW Stout Library Archives
- Key tool for working with the NSF MRI grant equipment
- Project Site: <https://bitbucket.org/Olliebrown/photoscan-helper>

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| Student Engagement | <ul style="list-style-type: none"> • Organized TrainJam student ambassador program • Sponsored student honors contract • Facilitated student-led photographing and scanning of artifacts from the UW Stout Library archives, Dunn County Historical Society, & Wilson Place Mansion | <p>Spring '16 Spring '16 Summer '15</p> |
| Academic Service | <ul style="list-style-type: none"> • Member of expert panel at the Museum Computer Network Conference • Faculty Senate member representing MSCS department <p>Committee Membership</p> <ul style="list-style-type: none"> • Technology fee committee • Game Design and Development program advisory committee • Professional advisory committee for the MFA in Design • UW Stout January professional development committee • Computers and Writing Conference Organizing Committee | <p>Fall '15 Since Fall '15 Since Fall '15 Since Fall '14 Since Fall '14 Since Fall '13 2014–15</p> |
| Professional Experience | <p>ThermaSolutions, Inc., White Bear Lake, Minnesota USA</p> <p><i>Independent Software and Systems Consultant</i></p> <ul style="list-style-type: none"> • Worked to help restore legacy systems for the ThermoChem HT-1000 for intraperitoneal hyperthermia therapy (heated medication applied to abdomen). • Restored embedded MSDOS system in several malfunctioning machines. • Worked to provide better documentation of legacy system and provide backups for future restoring of broken machines. <p>Benjamin Moore & Co., Flanders, New Jersey USA</p> <p><i>Wall of Inspiration</i></p> <ul style="list-style-type: none"> • Worked as senior software developer with Benjamin Moore Paints on a research project to develop a new tool for viewing and selecting paint colors. • Billed and arranged as a research assistantship through the University of Minnesota but was akin to software consultation. • Collaboration involved complex hardware and software development and resulted in a large in-store display in Manhattan's Chelsea district. <p><i>Independent Software Consultant</i></p> <ul style="list-style-type: none"> • Hired to support the software developed during the Wall of Inspiration project. • Helped to document and transfer support of the source code for this project to internal software engineers at Benjamin Moore. <p>Google / Crystal Space 3D</p> <p><i>Participant in the Google Summer of Code</i></p> <ul style="list-style-type: none"> • Worked on the open source project Crystal Space 3D. • Developed a new, off-line lighting system based on photon-mapping (a continuation of a previous summer of code project). • Improved static light-map generation. • A web-log documenting my work during this period can be accessed at http://www.crystalspace3d.org/blog/olliebrown | <p>Fall 2012 January 2005 – May 2007 July 2007 May – August, 2009</p> |