KELLENMAICHER

DESIGNER - **DEVELOPER** - EDUCATOR

765-586-0426
kmaicher@hotmail.com
www.kellenmaicher.com

EDUCATION

M.F.A.   Design - Digital Animation and Interactive Media - The Ohio State University, Columbus, Ohio

M.S.   Computer Graphics Technology - Purdue University, West Lafayette, Indiana

B.S.   Technical Graphics - Minors: Fine Arts, Psychology - Purdue University, West Lafayette, Indiana

WORK EXPERIENCE/ ACADEMIC APPOINTMENTS

2014 - Present   Consultant - Graphic Design/ Interactive Development

Wexner Medical Center
Columbus, OH

2010 - 2014   Graduate Teaching/ Research Associate

Department of Design/ Advanced Computing Center for Art and Design
The Ohio State University, Columbus, OH

2005 - 2010   Assistant Professor of Interactive Media

Department of Computer Graphics Technology
Purdue University, West Lafayette, IN

2001 - 2005   Continuing Lecturer of Interactive Media

Department of Computer Graphics Technology
Purdue University, West Lafayette, IN

1999 - 2001   Project Manager/ Interactive Developer

Sci-Media
West Lafayette, IN

1999 - 2001   Graduate Teaching Assistant

Department of Computer Graphics Technology
Purdue University, West Lafayette, IN

RESEARCH INTERESTS

Research endeavors focus on human design factors related to interactive media, with specific interests in user experience, affect, usability, and virtual characters.   Most recent work centered on the development of affective virtual characters for interactive media. Earlier work focused on effective implementations of Rich Internet Applications (RIAs) for education, including those specifically designed for human-computer interface technologies such as multi-touch computing, mixed-reality streaming video, 3D RIAs, and various mobile devices.

PROFICIENCIES

SKILLS: User experience design, interactive development, web design, illustration, 2D/ 3D graphics and animation, game design, stakeholder interviews, competitive analysis, cognitive walkthroughs, task analysis, SWOT analysis, heuristic evaluation, flow diagramming, wireframing, storyboarding, designing spec. sheets and style guides, focus groups, surveys, personas, mockups, low/high fidelity prototyping, usability (planning, testing, analysis, reporting)

SCRIPTING: HTML 5, CSS3, JavaScript, jQuery, ActionScript 3.0, MEL, Unity API

SOFTWARE: Unity3D Game Engine, Adobe Creation Suite (Dreamweaver, Flash, Photoshop, Illustrator, InDesign), 3D/ Video Tools (Maya, Premiere, After Effects, MotionBuilder), Microsoft Suite (Word, PowerPoint, Excel, etc.), some proficiency with MS Visio and Axure

AWARDS AND HONORS

- Edward E. Hayes Graduate Research Forum – First Place, Arts Field – Graduate Research Award co-sponsored by the Council of Graduate Students, the Graduate School, and the Ohio State University Office of Research. Its purposes are to: Feature excellent research conducted by Ohio State graduate students; Recognize outstanding graduate student scholarship within the University; Encourage graduate students to share their research with the Ohio State community; Facilitate exchange between students, faculty, administration, and the public (2013).

- James G. Dwyer Award Departmental Nominee – Annual teaching award in which representatives from each department in the College of Technology at Purdue University are nominated by their student body. Selection process was directed by representatives of the CGT student leadership under the supervision of the department head (2009).

- SIGGRAPH Outstanding Faculty Award - Annual teaching award given by members of the student chapter of SIGGRAPH at Purdue University who vote by written ballot prior to the yearly Spring Show and Awards Banquet (2008).

- SIGGRAPH Outstanding Faculty Award - Annual teaching award given by members of the student chapter of SIGGRAPH at Purdue University who vote by written ballot prior to the yearly Spring Show and Awards Banquet (2007).

- John A. Curtis Lecture Award - An annual award for the best paper presentation in the CoED sessions of the ASEE Annual Conference to honor John A. Curtis for his contributions to the development of CoED. Role: Co-authored paper with Purdue University Professors Carlos Morales and Gabriella Weaver (2007).

- SIGGRAPH Outstanding Faculty Award - Annual teaching award given by members of the student chapter of SIGGRAPH at Purdue University who vote by written ballot prior to the yearly Spring Show and Awards Banquet (2006).

- James G. Dwyer Departmental Nominee – Annual teaching award in which representatives from each department in the College of Technology at Purdue University are nominated by their student body. Selection process was directed by representatives of the CGT student leadership associated with SIGGRAPH, the CGT Student Council, and Epsilon Pi Tau under the supervision of the CGT Department Head (2006).

- Oppenheimer Award – Co-authored paper with Purdue University Associate Professor Patrick Connolly. Paper was presented by Prof. Connolly for the 58th Annual Engineering Design Graphics (EDGD) Midyear Conference. Total Funding: $400 (2004).

- Agricultural Team Award – Contributed with Dr. Bruce Watkins of the Food Science Department at Purdue University to submit a proposal for the award based on the work done for The Pizza Explorer Educational CD-

ROM. Major contribution consisted of technical writing on multimedia and hardware/ software specifications (2001).

GRANTS, GIFTS, AND FUNDED PROJECTS

- MedU Grant (in review) – Role: Contributor (50%) – Proposal for a comparative study assessing the effectiveness of using embodied conversational agents in virtual patient systems. Total Value: $25,000 (2014).

- Adobe Developer Program – Role: Principle Investigator (100%) – Lead in partnership development between Adobe Systems Inc. and Purdue University. In addition to software donation of 50 professional licenses of the Adobe Master Collection for three years, program provides support for faculty training and travel to various Adobe venues including Adobe MAX and the AEL Summer Institute. Total Value: ~$250,000 (2008-2009).

- ITaP Digital Content Program Grant – Role: Principle Investigator (100%) – Awarded Purdue University grant for the development of a project entitled: Cogent AIR Application. Total Funding: $13,110 (2008-2009).

- Fundex Games Sponsored Program – Role: Principle Investigator (100%) – Engagement partnership between Purdue University and Fundex games to develop a series of Flash games. Total Funding: $5,428 (2008-2009).

- Wolf Aviation Fund Grant – Role: Contributor (10%) – Alfred L. and Constance C. Wolf Aviation Fund awarded for developing a Web-based instructional simulation. Total Funding: $2,500 (2008-2009).

- SAIL Grant – Role: Co-PI (35%) – Awarded Purdue Office of International Programs grant for the development of the Chinese Industrial Outreach and Exchange Program. Total Funding: $7,000 (2008-2009).

- Stick-to-School Project: Opus City – Role: Co-PI (50%) – Co-led development of an educational game designed to encourage Indiana high school students to stay in school. Total Value: ~$85,000 (2008).

- St. Mary's Medical Center Transition Project - Role: Co-PI (50%) - Conducted website maintenance and supervised transition to new vendor for St. Mary's Medical Center of Evansville, Inc. Total Value: $10,000. (May 2006 – August 2006).

- ITaP Digital Content Program Grant – Role: Co-PI (15%) Co-authored Purdue grant for the development of a project entitled: Larger Scale Science Based Mobile Game Learning Environments. Total Funding: $15,000 (2006-2007).

- St. Mary's Medical Center Web Presence - Role: Co-PI (50%) Assisted the development of a Web presence for St. Mary's Medical Center of Evansville, Inc. Total Funding: $106,595. (February 14, 2005 – April 31, 2006.)

- St. Mary's Hospital Grant – Role: Co-PI (50%) Co-authored external grant for the development of a redesigned website for St. Mary's Hospital in Evansville, Indiana. Total Funding: $99,000 (2004).

- ITaP Digital Content Program Grant – Role: Co-PI (50%) Co-authored Purdue grant for the development of a Web-Based Multiview Drawing Application. Total Funding: $16,416 (2004).

- International Travel Grant - Role: Co-PI (35%) Co-authored grant for the purpose of allocating traveling expenses for a traveling computer graphics workshop. Total funding: $17,000 (2003).

- Department of Health and Human Services Grant - Role: Contributor (20%) Co-developed grant to submit to the Functional Foods SEPA Educational Model for Biology and Health. Major contribution consisted of technical writing on multimedia and hardware/ software specifications. Total funding: $200,000 (2001).

INSTRUCTIONAL EXPERIENCE

Design 571: Fundamentals of 3D Design Visualization - 2 quarters, Design Dept. - The Ohio State University

- Lectured on theory, methodology, and best practices of 3D modeling and visualization
- Reviewed the fundamentals of modeling, shading, textures, lighting, animation, rendering, and editing
- Presented practical demonstrations of Autodesk Maya, Adobe Photoshop, and Adobe After Effects
- Provided guidance in the development of models, materials, and animation/ rendering projects

Design 320: Electronic Media - 1 quarter, Design Dept. - The Ohio State University

- Lectured on principles and applications of electronic media design production
- Delivered practical demonstrations of Adobe Photoshop, Illustrator, and InDesign
- Updated curricula to integrate changes in technology and production methodology
- Taught production fundamentals of electronic media for print, web, and presentation applications
- Instructed students on the properties of graphic creation/ manipulation, layout, and preparation

CGT 353: Principles of Interactive and Dynamic Media - 11 semesters, CGT Dept. - Purdue University

- Lectured on theory, methodology, and best practices of interactive media development
- Delivered practical demonstrations of Adobe Flash, ActionScript, and related technologies
- Developed new curricula in migration from Flash MX - Flash CS4 and ActionScript 1.0 - 3.0
- Presented practical examples of multimedia development including interface design and scripting
- Provided guidance in the development of Flash applications, animations, web sites, and games

CGT 512: Human Factors of Computer Interface Design - 3 semesters, CGT Dept. - Purdue University

- Lectured on principles and applications of HCI, usability, and interface design
- Instructed students on assessment and validation strategies, protocols, and methodologies
- Implementation of interface design principles, standards and guidelines
- Introduced and moderated discussions of contemporary interface design
- Supervised applied research projects related to interface design assessment

CGT 211: Raster Imaging for Computer Graphics - 11 semesters, CGT Dept. - Purdue University

- Lectured on the fundamental principles and applications of raster imaging technologies
- Integrated related topics including image manipulation, interface design, and digital illustration
- Delivered practical demonstrations of Adobe Photoshop, Illustrator, and Freehand
- Provided guidance in the development of imaging, design, and illustration projects

CGT 451: Multimedia Application Development - 1 semester, CGT Dept. - Purdue University

- Lectured on theory, methodology, and best practices of advanced multimedia development
- Delivered practical demonstrations of Adobe AIR, Flex, and related technologies
- Created presentations on interactive media development, including advanced scripting
- Provided guidance in the development of gaming, e-business, and mobile application projects

CGT 256: Human Computer Interface Theory and Design - 2 semesters, CGT Dept. - Purdue University

- Lectured on principles of HCI design, usability, Web standards, and GUI development
- Delivered practical demonstrations of XHTML, CSS, JavaScript, and Dreamweaver
- Presented in-class examples of contemporary Web and interface design techniques
- Provided guidance in the development of various interface design projects

[CGT 241: Introduction to Computer Animation - 2 semesters, CGT Dept. - Purdue University](#)

- Lectured on the foundation principles of 3D computer graphics and animation
- Delivered practical demonstrations of Autodesk Maya, After Effects and related technologies
- Created presentations on modeling, rigging, material generation, lighting, and rendering
- Provided guidance in the development of models, materials, and animation projects

[CGT 411: Contemporary Problems in Applied Computer Graphics - 1 semester, CGT Dept. - Purdue University](#)

- Lectured on research and development protocols for applied computer graphics
- Focused on assessment methods including application and human subject testing
- Guided students in the exploration of emerging computer graphics technologies

[CGT 290H: Honors Program Seminar - 1 semester, CGT Dept. - Purdue University](#)

- Supervised and directed CGT honor student projects
- Introduced and moderated discussions of contemporary computer graphics issues
- Provided guidance in the development of focused research projects

[CGT 245: Game and Simulation Development - 1 semester, CGT Dept. - Purdue University](#)

- Lectured on principles of game design, mechanics, and gameplay
- Instructed students on the use of various mobile technologies including J2MEE and Flash Lite
- Provided guidance in the development of applied gaming projects

[CGT 141: Internet Foundations, Technology, and Development - 2 semesters, CGT Dept. - Purdue University](#)

- Lectured on the fundamental principles of Web design and development
- Introduced related topics including image generation and Web design guidelines
- Delivered practical demonstrations of XHTML, CSS, and JavaScript
- Implemented and supervised web site projects and laboratory exercises

[CGT 112: Sketching for Visualization and Communication - 2 semesters, CGT Dept. - Purdue University](#)

- Delivered independent lectures on sketching techniques
- Developed exercises and assessment tools
- Provided several independent lectures on the use of Adobe Flash
- Supervised laboratory activities

EXHIBITIONS

The Drinking Problem, Interactive Installation
DAIM Recall Exhibition - Hopkins Gallery - Columbus, OH
Oct. 13th – Nov. 21st, 2014

The Addict, Interactive Installation
Graduate Research Exhibition, 2013 – OSU Urban Arts Space - Columbus, OH

JOURNAL PUBLICATIONS

Maicher*, K. R., Danforth, R. J. (in review). The OSU Virtual Patient: Developing a Standardized Embodied Conversational Agent To Develop and Assess History-Taking Skills in Medical Students. *Simulation in Healthcare*.

Connolly, P. E. and Maicher, K. R. (2005). Continuing evolution of a web-based engineering graphics tutorial: interactive input and response. *The Engineering Design Graphics Journal, 69*(1), 26-33.

Watkins, B.A., Watkins, C.T., Rogers L., Maicher, K.R., Li, Y., Friend, B. (2001). Food Chemistry Experiments Workbook. Institute of Food Technologists.

REFEREED CONFERENCE PROCEEDINGS

Morales, C.R., Weaver G., Maicher, K.R., Martinez-Hernandez, K. (2006). Teaching Chemistry Using Immersive Games. *Proceedings of the 231st National Meeting of the American Chemical Society,* Atlanta, GA.

Glotzbach, R.J., & Maicher, K.R. (2006). Challenges of e-Health: Designing dynamic custom websites for healthcare facilities. *Proceedings of the 2nd International Conference on Web Information Systems and Technologies*

Glotzbach*, R. J., & Maicher, K. R. (2006). Using Industry Partnerships in Academia as an Instructor-Learner Paradigm. *Proceedings of ED-MEDIA 2006 annual World Conference on Educational Multimedia, Hypermedia, and Telecommunications* (pp. 1377-1382). Chesapeake, VA: AACE. Orlando, FL.

Connolly *, P. E., Maicher, K. R. (2005). The Development and Testing of an Interactive Web-Based Tutorial for Orthographic Drawing Instruction and Visualization Enhancement. ASEE Annual Conference, Portland, Oregon.

Connolly, P. E., Maicher, K. R. (2004). Continuing Evolution of a Web-based Engineering Graphics Tutorial: Interactive Input and Response. *Proceedings of the 58th Annual Engineering Design Graphics Midyear Meeting*, Williamsburg, Virginia.

Maicher*, K. R., and Connolly, P. E. (2003). Using web authoring applications in tutorial development. *Proceedings of the 57th Annual Engineering Design Graphics Midyear Meeting*, Scottsdale, Arizona.

Connolly, P. E., Maicher, K. R. (2003). Instructional design of a web-based engineering graphics tutorial. *Proceedings of the 57th Annual Engineering Design Graphics Midyear Meeting*, Scottsdale, Arizona.

REVIEWED CONFERENCE PROCEEDINGS

Maicher*, K.R., Sarapin, Cory C.A., Connolly P.E., Mohler J.L. (2009). Globalizing a Computer Graphics Technology Curriculum. *2009 ASEE Annual Conference & Exposition.*

Maicher*, K.R., Garofalo F., Burton T.L. (2009). cgCentral: A Rich Internet Application for Education. *Teaching Learning Technology Conference*, Purdue University, West Lafayette, IN.

Maicher*, K.R., Sarapin, Cory C.A., Connolly P.E., Mohler J.L. (2008). Globalizing a Technology Program via International Internships and Study Abroad in China. *Proceedings of the 2008 NAIT Conference.*

Maicher, K.R. (2007). Accounting for Student Variability: A Track-Based System for Teaching Applied Computer Graphics. *Proceedings of the 5th Annual Hawaii International Conference on Education.*

Maicher*, K.R. and Glotzbach, R.J. (2007). Digital Master: A Supplementary Online Application for Teaching Applied Computer Graphics. *Proceedings of the 5th Annual Hawaii International Conference on Education.*

Glotzbach*, R.J., and Maicher, K.R. (2007). Industry Partnerships in Education. *Proceedings of the 5th Annual Hawaii International Conference on Education.*

Glotzbach, R.J., & Maicher, K.R. (2006). Challenges of e-Health: Designing dynamic custom websites for healthcare facilities. *Proceedings of the 2nd International Conference on Web Information Systems and Technologies.*

Glotzbach*, R.J., Maicher, K.R., Luther, K., Co, B., Kellogg, L., & Mordkovich, D. (2006). *St. Mary's Medical Center: An e-Health initiative.* Poster presentation at the 2006 Undergraduate Research and Poster Symposium, Purdue University, West Lafayette, IN.

Glotzbach*, R.J. and Maicher, K.R. (2006). Using Industry Partnerships in Academia as Instructor-Learner Paradigm. *Proceedings of ED-MEDIA 2006 Annual World Conference on Educational Multimedia, Hypermedia, and Telecommunications.*

Glotzbach, R.J., & Maicher, K. (2005). St. Mary's Medical Center: Engagement partnership, developing a web presence. Poster presentation at the 2005 college of technology faculty convocation, Purdue University, West Lafayette, IN.

Maicher*, K. R. and Connolly, P. E. (2005). Development of a Web-based Multiview Drawing Application., Teaching Learning Technology Conference, Purdue University, West Lafayette, IN.

Morales C., Maicher, K.R. (2003). Development of a Distance-Learning Intelligent Instructional Delivery System., Teaching Learning Technology, 2003 Conference, Purdue University, West Lafayette, IN.

REVIEWED CONFERENCE PROCEEDINGS (WITHOUT PRESENTATION)

Morales, C.R., Weaver G., Maicher, K.R. (2007). Learning within Cultural Contexts – An Immersive Chemistry Game. *Proceedings of the Gordon Research Conference: Chemistry Education Research and Practice.*

Morales, C.R., Weaver G., Maicher, K.R. (2007). Larger Scale Science Based Mobile Game Learning Environments. *Proceedings of the Teaching Learning Technology Conference.*

Weaver G. C.*, Danforth D., Martinez-Hernandez K., Morales C. R., Maicher K.R. (2006). Development and Testing of a Chemistry-based Video Game. *19th Biennial Conference on Chemical Education.*

PUBLISHED ABSTRACTS IN CONFERENCE PROCEEDINGS

Danforth D., Price A. , Maicher K.R. , Post D., Liston B., Ledford C., Way D., Cronau H. (2014). Using Virtual Standardized Patients (VSP) to Assess History Taking Skills in Medical Students. *Proceedings of the Generalists in Medical Education Conference.*

Maicher*, K.R., Sarapin, Cory C.A., Connolly P.E., Mohler J.L. (2009). Globalizing a Computer Graphics Technology Curriculum. *2009 ASEE Annual Conference & Exposition.*

Maicher*, K.R., Sarapin, Cory C.A., Connolly P.E., Mohler J.L. (2008). Globalizing a Technology Program via International Internships and Study Abroad in China. *Proceedings of the 2008 NAIT Conference.*

Morales, C.R., Weaver G., Maicher, K.R. (2006). An Immersive Chemistry Video Game. *Proceedings of the 2006 SIGGRAPH Annual Conference.*

Morales, C.R., Weaver G., Maicher, K.R., Martinez-Hernandez, K. (2006). The Design Process of a Chemistry Video Game. *Proceedings of the ASEE Annual Conference*, Chicago, IL.

Connolly*, P.E., Maicher, K.R. (2005). Computer-based Instruction &Web-based Tutorials: Effectiveness and Applications. *Proceedings of the 35th ASEE/ IEEE Frontiers in Education Conference*, Indianapolis, Indiana.

INVITED PRESENTATIONS

2009   Adobe MAX Conference, San Francisco, CA. Exploring New Uses for Rich Internet Applications in Education.

2009   Adobe Webinar, (Virtual) Rich Internet Applications for Education.

2008   Adobe MAX Conference, San Francisco, CA. Using Adobe AIR in Education.

2003   University of Norway, Bergen Norway. Workshop: Animation & Rendering - Introduction to Lighting Materials and Movement.

2003   Poznan University, Poznan, Poland. Workshop: Graphics Creation and Interactive Multimedia Development.

2003   University in Rzeszow Poland. Workshop: Graphics Creation and Interactive Multimedia Development.

2003   Krakow University, Krakow, Poland. Workshop: Graphics Creation and Interactive Multimedia Development.

2003   Tula University, Tula Russia. Workshop: Graphics Creation and Interactive Multimedia Development.

ENGAGEMENT/ OUTREACH PROJECTS

- CGT Summer Camp Co-Director – Annual summer camp for the Department of Computer Graphics Technology with Purdue University Professor Clark Cory. Camp annually draws 40-60 high school students. (2003 - 2010).

- Chinese Industrial Outreach and Exchange Program – initiated program designed to promote industrial exchange after surveying companies with interests in China including Boeing, Caterpillar, IBM, United Technologies, Universal Idea Consultants, ChinaBeat Design Studios, Better Chinese Design Studios, MAD Architectural Studio, Institute of Digital Design, Beijing Institute of Graphic Communication, and the Department of Information Design at Tsinghua University (2008).

- LSIS Web Project – Led a team of students to develop a Web presence and online data collection application for the Laboratory for Sensory and Ingestive Studies at Purdue University (2005).

- DNA Representation - Worked with Dr. Robert Stewart of Purdue University to develop a series of static visualizations of single strand and double strand breaks in DNA at the molecular and atomic level (2003).

- Foreign Languages Collaboration - Worked with Professor Kazumi Hatasa of Purdue University to develop static and animated instructional graphics for textbook series and class materials (2003).

- School of Health Sciences Website - Worked with the Purdue University Department of Health Sciences faculty to identify needs and resources for redesigning the School of Health Sciences website at Purdue University, West Lafayette (in development). Negotiated the part-time hiring of one CGT graduate student (2002).

- "Bubba Blocks" Multimedia Application - Collaborated with company representatives to assist with the development of a children's application to teach spatial relationships and geometry. Negotiated the part-time hiring of two CGT graduate students (2002).

- MCMP/ School of Pharmacy Website - Supervised a senior CGT group in the development of a new website design for the School of Pharmacy and the department of Medicinal Chemistry and Molecular Pharmacology at Purdue University, West Lafayette (2002).

- Learning EnAbled Digital Environment Resource (LEADER) Project - Worked with Purdue University faculty to identify needs and resources for an application designed to teach research methodologies using multimedia modules. Negotiated the part-time hiring of one CGT student (2002).

- Pizza Explorer CD-ROM - Supervised and assisted the creation of an interactive educational CD designed to teach K-12 students food chemistry with Dr. Bruce Watkins of Purdue University (2001).

- USDA Application - Assisted in the design and construction of an educational food science application (2001).

- EFPH Website - Supervised and assisted the creation of a Flash-based site for the Enhancing Foods to Protect Health Research Center (www.efph.purdue.edu) (2001).

- BASE Website - Supervised and assisted the creation of a website for the Biological and Agricultural Science Education Consortium (www.purdue.edu/base) (2001).

SERVICE ACTIVITIES

- Faculty Advisor for Purdue Student Chapter of ACM SIGGRAPH – Guided chapter officers and members in the activities and endeavors of the 75 member chapter. (2005-2010).

- CGT Educational Policy Committee, Voting Member – Committee dedicated to setting educational policy in the Department of Computer Graphics Technology at Purdue University. (2009-2010).

- CGT Marketing Committee, Voting Member – Collaborated with other Purdue University CGT faculty members to create a marketing/ promotion strategies for the department. Included organizing activities for the annual ACM SIGGRAPH conference and other venues. (2005-2010).

- COT Educational Policy Committee, Voting Member – Committee dedicated to setting educational policy in the College of Technology at Purdue University. (2009-2010).

- CGT Educational Policy Committee, Chair – Led committee responsible for contributing to the direction of educational policy in the Department of Computer Graphics Technology at Purdue University. (2007-2009).

- Curriculum Committee, Voting Member - Collaborated with other Purdue University CGT faculty members to guide the direction of departmental engagement activities and initiatives (2003-2004).

- Engagement Committee Member - Collaborated with other Purdue University CGT faculty members to guide the direction of departmental engagement activities and initiatives (2002-2003).

- Independent Study Sponsor - Directed the development of 15 undergraduate independent studies to allow student to pursue various interests outside the curriculum (2003-2009).

- CGT Senior Project Sponsor - Directed the development of Purdue University CGT senior group projects including the following titles: cgCentral: v2 (2009), xOpenAIR Chat Application (2008), cgCentral (2008), Anthropomorphic Characters for Storytelling (2007), Creating a Nintendo Wii Flash Game (2007), Developing a Usability Lab (2002), School of Pharmacy Web Presence Re-design (2002), Cellular Biology Simulation (2002), Pizza Explorer: Teaching Food Chemistry Application (2001).

- High School Presentation - Visited five Indiana high schools to assist in promotional presentation about the Purdue Food Science program, the Pizza Explorer CD-ROM, and the IFT Food Chemistry experiment book (2001).

- Graphic Design - Creation of various graphics for Cary Quadrangle residence hall that was used in promotional, functional, and training materials (2001).

PROFESSIONAL ASSOCIATIONS AND OTHER ACTIVITIES

- Adobe Educational Leader (2008-2014).

- ACM SIGGRAPH Student Chapter Advisor (2004-2010).

- National Association of Industrial Technologists (NAIT) (2009-Present).

- American Society of Engineering Education Member (2009-Present).

- Purdue University Faculty Fellow (2001-2010).

- Tau Gamma Sigma member - Purdue Technical Graphics Honor Society (2001-Present).

- Phi Kappa Sigma Fraternity - Alumni Board Member (2002-2006).

- National Association of Photoshop Professionals (NAPP) - Educational Member (2002-2003).

- Graphicon Review Committee Member (2004).

- SIGGRAPH Educator's Program Review Board Member (2003).

- Film Festival Reviewer - Judged entries in the 35th annual U.S. International Film and Video Festival (2002).