Curriculum Vitae

Chris K Palmer

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Education

1993 Studied and developed paper folding techniques of master instructor Shuzo Fujimoto, Sasayama-Cho, Japan, developed an original portfolio of crease patterns

1991–1992 Independent study of mosaics at the Alhambra in Granada, Spain for six months, continuing study and development of tiling composition skills to present

1990 BFA, University of California at Santa Cruz: Major in printmaking-lithography

Teaching Experience

2010 Two summer workshops teaching Shadowfolds textile folding techniques at the Exploratorium, San Francisco, CA

2009 Kansai Convention JOAS (Japanese Origami Academic Association), invited speaker

2009 Lecture "Tradition Meets Modern Digital Fabrication", Dept. of Architecture, University of Tokyo, Japan

2007-present University of Colorado at Boulder; Intro to AutoCad, Advanced AutoCad, Intro to Computer Media, SlideTab Introductory Workshop, Design Build Studio 3 Geometry in Architecture Fall 2008 (www.shadowfolds.com/StudioFall08), Digital Design and Fabrication Spring/Fall 08-9 www.shadowfolds.com/DigitalFabricationCU, www.shadowfolds.com/DigitalDesignFabFall08

2005-2007 Illinois Institute of Technology School of Architecture, Chicago IL; Studio with Ben Nicholson, Intro to Architectural Computing, Digitial Design and Fabrication with TJ Mcleish

2006 4OSME Origami Science Mathematics and Education Convention, presented "Recursive Folding from Flower Towers to Whirl Spools"

2006 Seventh Annual Gathering for Martin Gardner in Atlanta, GA, convention for mathematicians, magicians and puzzle enthusiasts, invited speaker

2005 Athens Science and Art Convention, Greece, invited speaker

2005 Origami Convention, Paris, France, invited instructor

2005 Folding Australia, Origami Convention, Melbourne, Australia, taught classes

2004 IIT, Chicago, IL, Paper Structure for Enclosing Space, a Visual Training class

1994–2007 OrigamiUSA Convention, New York, NY, taught classes

2001–2006 Japan Origami Academic Society annual conventions in Tokyo, Japan, presented, exhibited and taught classes

2004 Biwako Biennale, Ohmi-Hachiman, Shiga, Japan, taught paperfolding class

2004 Maryland College of Art, Online Tiling Applications, lecture for Islamic Art History class

2004 Bridges Art and Math Convention, Southwestern College, Winfield, KS, exhibited and presented authored paper "Applications for the Study of Tilings"

2003 ISAMA—Bridges Art and Math Convention, University of Granada, Spain, exhibited and presented authored paper "Folding Polyhedra and Painting Mosaics"

2001 Third International Conference on Origami in Science, Mathematics and Engineering, Monterey, CA, presented original and proprietary techniques with authored paper "Scurls and WhirlSpools"

2000 Fourth Annual Gathering for Martin Gardner in Atlanta, GA, convention for mathematicians, magicians and puzzle enthusiasts, presented original and proprietary techniques: "Shadowfolds"

1998 Joint Mathematics Meeting (AMS-MAA), Baltimore, MD, presented paper "Spiral Vertextiles," authored with John Conway, Mathematics Department, Princeton University, NJ

1996–1997 Art and Math Convention at SUNY, Albany, NY. Exhibited, lectured and conducted all-day class

1994 Second International Meeting of Scientific Origami, Otsu, Japan, group exhibit, presented authored paper "Extruding and Tessellating Polygons from a Plane"

Lab Skills

2005-present Ilinois Institute of Technology School of Architecture; Setup and training provided for Bridgeport CNC Milling machine including software and hardware integration. IIT and UC Berkeley supervision and training for the use of the Universal Laser cutters provided to student workers and students, production of online and print tutorials for the use of the CNC mill and laser cutter, maintenance of machines. Operation and supervison of Precix 4'x8' 3-axis CNC Milling machine (IIT), Techno Isel 3-axis CNC Milling machines at (UC Boulder and UC Berkeley) and Shopbot 3-axis CNC mill in shop in San francisco, CA. Toolpath generation using MadCam, RhinoCam and VCarvePro.

1999–2004 Kadon Enterprises, , operated two Kern CadCam laser cutters (2' x 2', 2' x 4') for a game puzzle company. Production of acrylic puzzle pieces and engraved wooden game boards. Drafting for prototypes.

2004 Development Design Group, installed and operated rotary attachment for 18" x 24" Universal laser machine

Computer Skills

- Grasshopper assembly development for Rhinoceros
- RhinoScript/C#/Python script and plug-in development for Rhinoceros
- 2-D and 3-D drafting with AutoCAD and Rhinoceros and 3DMax
- Programming with Flash CS3; stand-alone/web applications and web pages
- Flash graphical user interfaces with video instruction for cross-platform Mac/Win CD-ROM production
- CGI scripting with PHP, Perl and javascript for dynamic web applications
- VBA programming with Excel
- Proficiency with DreamWeaver, Fireworks, PhotoShop, Illustrator, Acrobat Professional
- Proficiency with digital video editing and production

Other Professional Experience

2011-present CADCAM Manager for the College of Envirionmental Design at UC Berkeley.
2011 Design and production of custom art screens for seating area at the Exploratorium, San Francisco, California.
2007-present Member of design team headed by Jay Bonner (http://www.bonner-design.com) for architectural ornamentation of the American Institute of Mathematics Research Conference Center, San Jose CA
2009 Managed with Paul Hildebrant group construction of largest Zometool structure (~45,000 parts) at the Bridges Art and Math conference in Banff, Canada.
2009 Developed FingerPanel system for no glue/fastener flat face mesh compositions and Rhinoscript/Grasshopper tools to automate drafting of parts
2008 Developed RibMaker and RibMakerCS systems to realize crossing rib compositions and Rhinoscript to automate drafting of parts www.shadowfolds.com/RibMaker
2007 Developed SlideTab paper engineering system and Rhinoscript tool to automate drafting of parts. www.slidetab.com
2006-2009 AuroDyn Inc. Vice President of Design
2006 Development of RhinoScripts for the automated detailing of space frames allowing a seamless integration with the architectural workflow for Aurodyn, Inc.
1998–present Kadon Enterprises, Pasadena, MD, associate designer of game puzzles
2004 Development Design Group, 2- and 3-D drafted, modeled and assembled 8' tall model of two 60-floor residential towers (shadowfolds.com/metro_flag/metro_flag.html)
2001 JQB, produced 14 Shadowfolds panels for Seattle, WA yacht designers, installed in seven state rooms of the *Aerie,* a 124' Delta yacht
1998–2001 Collaborated with fashion designer David Rodriguez on original apparel collection for women sold to Nieman Marcus, Jacobson's, Hirshleifers and Tootsies
1999 RTKL Associates, Washington D.C., installed Shadowfolds screen for office
1999 Kadon Enterprises, designed and programmed Flash-based online game Puzzle Parlor
1997 Lotus Software Development Corp., interior design installation
1995–present Developed proprietary techniques translating paperfolding patterns into uniquely folded textiles, called Shadowfolds.

Publications

2011 "Shadowfolds: Surprisingly Easy to Make Geometric Designs in Fabric" with co-author Jeff Rutzky. Published by Kodansha International. ISBN: 978-1-56836-379-0
2005 "Spiral Tilings with C-curves Using Combinatorics to Augment Tradition, published in *Renaissance Banff: Bridges Mathematical Connections in Art, Music and Science,* refereed conference proceedings, with editors Reza Sarhangi, Mathematics Department, Towson University, MD and Robert V. Moody Department of Mathmatics and Statistics www.shadowfolds.com/whirl_spools_paper/ScurlsBridges9.pdf
2005 "Spiral Tilings with S-curves and C-curves, Using Combinatorics to Augment Tradition," by Chris K. Palmer, *VisMath,* a visual mathematics art and sciences online journal (www.mi.sanu.ac.yu/vismath/palmer), with editors Slavik Jablan, Mathematics Institute, Belgrade, and Denes Nagy, Tsukuba Science City, Japan
2004 "Applications for the Study of Tilings," by Chris K. Palmer, Reza Sarhangi, and Slavik Jablan, Mathematics Institute, Belgrade, published in *Bridges Mathematical Connections in Art, Music and Science,* refereed conference proceedings, with editors Reza Sarhangi,
Carlo Sequin, EECS Computer Science Division, University of California at Berkeley
2003 "Folding Polyhedra and Painting Mosaics," by Chris K. Palmer, published in *Meeting Alhambra,* refereed conference proceedings, with editors Javier Barrallo, School of Architecture, University of the Basque Country, San Sebastian, Spain, *et al.,* University of Granada, Granada, Spain
2001 Self-published four origami instructional CD-ROMs with original designs on cross-platform Mac/Win) with sales worldwide
2002 *ArtWorks This Week,* Maryland Public Television, featured artist
2000 *Origamido—Masterworks in Folded Paper,* Michael LaFosse, featured artist
1998 *Paper Art,* Michael LaFosse, featured artist
1997 *Passport to Math*, Larson, McDougal, Littell, featured artist with biographical sketch
1995 *Oru* magazine, *Origami Arabesque,* vol. 9

Exhibitions

2006 Moka Gallery, Chicago, IL
2004 Celebration of Textiles, The Textile Museum, Washington D.C.
2003–2004 Origami Masterworks, Mingei International Museum, Balboa Park, San Diego, CA
2002 International Origami Exhibit, The Depot Arts Center, Anacortes, WA
1999 Pacific Northwest Arts Fair, Bellvue, WA
1998 Paris Origami, Carrousel du Louvre, Paris
1994–2004 OrigamiUSA Convention, New York, NY
1995 Oriental Influences, Pope Gallery, Santa Cruz, CA
1994 Origami Arabesques, The Origami House, Tokyo, Japan

Gallery Representation

2006-present Moka Gallery, Chicago IL
1997-present Origamido Studio, Haverhill, MA