BILL TOMLINSON

4017 Highland Ave. #301
Manhattan Beach, CA 90266

badger@media.mit.edu
http://www.media.mit.edu/~badger
Mobile: 310.529.6056

EDUCATION:

2002   Ph.D., Media Arts & Sciences
        Massachusetts Institute of Technology, Cambridge, MA
        Dissertation: "Synthetic Social Relationships for Computational Entities"
        Advisor: Bruce Blumberg, Committee: Cynthia Breazeal, Rosalind Picard, Richard Wrangham

1999   S.M., Media Arts & Sciences
        Massachusetts Institute of Technology, Cambridge, MA
        Thesis: "Interactivity and Emotion through Cinematography"
        Advisor: Bruce Blumberg, Committee: Glorianna Davenport, Tom Porter

1996   M.F.A., Experimental Animation, School of Film/Video
        California Institute of the Arts, Valencia, CA
        Thesis Film: "Shaft of Light"

1994   A.B., *cum laude,* Biology Concentration
        Harvard College, Cambridge, MA

INTERACTIVE MEDIA INSTALLATIONS:

2002-03   "AlphaWolf" – Future Cinema exhibition, ZKM Center for Art and Media, Karlsruhe, Germany
           B. Tomlinson, M. Downie, M. Berlin, J. Gray, A. Wong, R. Burke, D. Isla, Y. Ivanov, M. P.
           Johnson, D. Lyons, J. Cochran, B. Yong, B. Blumberg

2002   "AlphaWolf" – Ars Electronica 2002, Linz, Austria

2002   "AlphaWolf" – Game Developers Conference, Morgan Kaufmann Booth, San Jose, CA

2001   "AlphaWolf" - SIGGRAPH 2001 Emerging Technologies, Los Angeles, CA

2001   "sheep|dog: Trial by Eire" - Electronic Entertainment Expo (E3 '01), Los Angeles, CA
           B. Blumberg, R. Burke, D. Isla, M. Downie, S. Eaton, B. Tomlinson, M. Berlin, J.Gray, D. Stiehl

2000   "sheep|dog: Trial by Eire" – Opening of the MediaLabEurope, Dublin, Ireland

1999   "sand:stone" – 7th New York Digital Salon, New York, NY
           B. Tomlinson, M. Downie, A. Benbasat, J. Wahl, D. Stiehl, B. Blumberg

1999   "(void*): A Cast of Characters" – SIGGRAPH 99 Emerging Technologies, Los Angeles, CA
           B. Blumberg, B. Tomlinson, M. P. Johnson, S.-Y. Yoon, M. Downie, A. Benbasat, J. Wahl, D.
           Stiehl, D. Nain

1998   "Swamped!" – SIGGRAPH 98 Emerging Technologies, Orlando, FL
           B. Blumberg, M. P. Johnson, M. Hlavac, C. Kline, K. Russell, B. Tomlinson, S.-Y. Yoon, A.
           Wilson, T. Marrin, J. Paradiso, J. Wahl, Z. Teegarden, D. Stiehl

1997   "Toco the Toucan" – SIGGRAPH 97 Emerging Technologies, Los Angeles, CA
           D. Roy, M. Hlavac, T. Jebara, B. Tomlinson, C. Wren, A. Pentland

1996   "Boxed In" – 15'x10'x6' sculpture/video installation, The Artfront Partnership, Philadelphia, PA
           B. Tomlinson, L. Tomlinson

FILMS:

1996   Filmmaker – "Shaft of Light" – 16mm. stop motion animation (8 min. 46 sec.)
Distributed by the Anti-Defamation League in its Anti-Bias/Diversity Catalog
Theatrical Screenings (1996-98):
        Sundance Film Festival
        World Animation Celebration
        Black Maria Film Festival
        Cinanima
        Directors Guild of America
        GenArt Film Festival
        Medicine Wheel Film Festival
        New Orleans International Short Film Festival
        New York Expo of Short and Documentary Film
        Palm Springs International Short Film Festival
        Philadelphia Festival of World Cinema
        Uppsala International Short Film Festival
        Denver International Film Festival
        Sinking Creek International Short Film Festival
        Albany International Short Film Festival
        Bilbao International Festival of Documentary and Short Film
        Taos Talking Pictures
        Armchair Film Festival
        Atlanta International Film Festival
        Florida International Film Festival
        Brussels International Festival of Fantasy, Thriller and Science Fiction
Television Screenings:
        Bravo (1997-2000)
        Independent Film Channel (1997-2000)
        Sci-Fi Channel ("EXPOSURE," 2000-2001)

1996   Writer/Director/Producer – "Artemis" – 16mm. live action feature (75 min.)

1994   Co-Director (with Harvard VES 50) – "Boot Camp" – 16mm. live action documentary (28 min.)
Screening: Stanford University Film Festival

HONORS & AWARDS:

2002   Digital Art Awards, Keio University, Grand Prize, Interactive category, "AlphaWolf"

2002   Prix Ars Electronica, Honorary Mention, Interactive Art, "AlphaWolf"

1997-02 MIT Media Lab Research Assistantship, Synthetic Characters Group

1998   Cinanima – Choice of the Jury, "Shaft of Light"

1997   World Animation Celebration – 2nd Place, The Jim Henson Award for Best Stop Motion
Produced by an Independent, "Shaft of Light"

1997   CINE – Eagle, "Shaft of Light"

1997   Black Maria Film Festival – Director's Choice, "Shaft of Light"

1996   Artfront Partnership Grant – "Boxed In"

1995   CalArts New Plays Festival – play selected for production, "Shaft of Light"

1994   Eliot House Master's Cup – for service to Eliot House, Harvard University

PUBLICATIONS:

2002   B. Blumberg, M. Downie, Y. Ivanov, M. Berlin, M. P. Johnson, B. Tomlinson. "Integrated Learning for Interactive Synthetic Characters." In: *Computer Graphics, Proceedings of SIGGRAPH 2002*. San Antonio, TX.

2002   B. Tomlinson, M. Downie, M. Berlin, J. Gray, D. Lyons, J. Cochran, B. Blumberg. "Leashing the AlphaWolves: Mixing User Direction with Autonomous Emotion in a Pack of Semi-Autonomous Virtual Characters." In: *Proceedings of the 2002 ACM SIGGRAPH Symposium on Computer Animation*. San Antonio, TX.

2002   B. Tomlinson, B. Blumberg. "Synthetic Social Relationships in Animated Virtual Characters." In: *From Animals to Animats 7. Proceedings of the Seventh International Conference on the Simulation of Adaptive Behavior (SAB '02).* Edinburgh, UK.

2002   B. Tomlinson, B. Blumberg. "Social Synthetic Characters." (Visfiles column, edited by Bill Hibbard) In: *Computer Graphics. Vol. 26, No. 2. (May 2002).*

2002   M. Downie, B. Tomlinson, B. Blumberg. "Developing an Aesthetic: Character-Based Interactive Installations." In: *Computer Graphics. Vol. 26, No. 2. (May 2002).*

2002   W. Tomlinson. "Synthetic Social Relationships for Computational Entities." Doctoral Dissertation. MIT Program in Media Arts & Sciences.

2002   B. Tomlinson, B. Blumberg. "AlphaWolf: Social Learning, Emotion and Development in Autonomous Virtual Agents." In: *First GSFC/JPL Workshop on Radical Agent Concepts*. NASA Goddard Space Flight Center, Greenbelt, MD.

2001   B. Blumberg, B. Tomlinson, M. Downie. "Multiple Conceptions of Character-Based Interactive Installations." In: *Proceedings of Computer Graphics International 2001*. Hong Kong.

2001   B. Tomlinson, B. Blumberg. "Social Behavior, Emotion and Learning in a Pack of Virtual Wolves." In: *2001 AAAI Fall Symposium "Emotional and Intelligent II: The Tangled Knot of Social Cognition".* November 2-4, 2001. North Falmouth, MA.

2000   B. Tomlinson, B. Blumberg, D. Nain. "Expressive Autonomous Cinematography for Interactive Virtual Environments." In: *Proceedings of the Fourth International Conference on Autonomous Agents (Agents 2000)*, Barcelona, Catalonia, Spain.

2000   B. Tomlinson, B. Blumberg, B. Rhodes. "How Is an Agent Like a Wolf?: Dominance and Submission in Multi-Agent Systems." In: *International ICSC Symposium on Multi-Agents and Mobile Agents in Virtual Organizations & E-Commerce (MAMA 2000).* Dec. 11-13, 2000. Wollongong, Australia.

1999   W. Tomlinson. "Interactivity and Emotion through Cinematography." Master's Thesis. MIT Program in Media Arts & Sciences.

1999   B. Tomlinson. "Dead Technology." In: *Style* Vol. 33 No. 2, p. 316-335.

1999   Synthetic Characters Group (B. Tomlinson, M. Downie, A. Benbasat, J. Wahl, D. Stiehl, B. Blumberg). "sand:stone - Artist Statement." In: *Leonardo* Vol. 32, No. 5, p. 462-463.

1997   B. Tomlinson. "The Sundance Kid." Philadelphia City Paper, 1/30/97

PROFESSIONAL EXPERIENCE:

2002   Massachusetts Institute of Technology, Cambridge, MA
Robotic Life Group, The Media Laboratory
Creative Consultant. Animated, sculpted and produced for installations at
SIGGRAPH 2002 and the Smithsonian National Design Triennial.

1997-02 Massachusetts Institute of Technology, Cambridge, MA
Synthetic Characters Group, The Media Laboratory
Research Assistant. Collaborated on group projects. Demonstrated research to corporate
sponsors. Supervised undergraduate researchers.

1999   Mattel, Inc., El Segundo, CA
Intern in Design & Development Department. Consulted on embedding digital media in plush
toys.

1996-97 MacTemps (now Aquent), Cambridge, MA
Web design and graphic production for clients including the Harvard-Smithsonian Center for
Astrophysics and the Harvard University Press.

1995-96 Ken Sherman and Associates, Beverly Hills, CA
Intern. Reviewed scripts and created computer database for literary agency.

1995   Magic Mountain, Valencia, CA
Roving Ghoul. Frightened park visitors waiting in line for the Haunted Mansion.
Wielded chainsaw.

TEACHING EXPERIENCE:

2003   UCLA, Extension School, Los Angeles, CA
Co-organizing and moderating one-day conference/course on computer games.

2002   UCLA, Los Angeles, CA
Guest Lecture, "Media Studies", Professor: Machiko Kusahara

1997-02 Massachusetts Institute of Technology, Cambridge, MA
Undergraduate Research Opportunities Program
Supervised undergraduate researchers. Directed research and participation in group projects.
     AlphaWolf (2001) – Led team of sixteen (eight full-time), including seven undergrads.
     sand:stone (1999) – Led team of six, including two undergrads.
     void* (1999) – Second author on team of nine, including three undergrads.

2001   Cambridge University, Cambridge, UK
Cambridge University Moving Image Studio/MIT workshop
"Autonomous Camera Control for Virtual Environments"

2001   Massachusetts Institute of Technology, Cambridge, MA
"Workshop on Embodied Presence," Fall Sponsor Week, The Media Laboratory
Led by Prof. Bruce Blumberg, Prof. Cynthia Breazeal and Bill Tomlinson
Attendees included Stan Winston (founder of Stan Winston Studio, creator of special effects for
movies such as *The Terminator* and *Jurassic Park*) and Ivy Ross (Senior VP at Mattel).

1998   Massachusetts Institute of Technology, Cambridge, MA
Guest Lecture, "Introduction to Media Studies." Professor: Glorianna Davenport

1996   California Institute of the Arts, Valencia, CA
Teaching Assistant, "Stop-Motion Animation." Instructor: Gary Schwartz

INVITED LECTURES:

2002   "Computational (Proto)Ethics: Interactive Stories, Artificial Intelligence and Synthetic Social Relationships" – UCF School of Electrical Engineering and Computer Science, Orlando, FL

2002   "Socially Competent Computational Characters" – UCF Texts & Technology Program and Institute for Simulation & Training, Orlando, FL (A. Louis Medin Modeling & Simulation Seminar Series)

2002   "Social Synthetic Characters and Interactive Installations" – RPI iEAR Studio, Troy, NY

2002   "Some stories about making characters." – USC Division of Animation & Digital Arts, Los Angeles, CA

2001   "Synthetic Social Behavior" – Keynote, International Conference on Virtual Storytelling, Avignon, France. (Delivered in place of B. Blumberg, who was unable to attend.)

2001   "Synthetic Social Intelligence" – Metapolis Think Tank, Barcelona, Catalonia, Spain

2001   "Toys as Interfaces to Computer Games" – Entertainment in the Interactive Age, USC, Los Angeles, CA

2001   "Synthetic Characters, Entertainment, and Film" – Future Film Festival, Bologna, Italy

2000   "Putting the 'Living' in Living Architectures" – Living Architectures Summit, Banff New Media Institute, Banff, Canada (with R. Burke)

2000   "Compelling Synthetic Character Design" – FMX2K, Stuttgart, Germany

2000   "Building Life-Like Characters" – University of the Arts, Philadelphia, PA (Paradigm Lecture Series)

1998   "On 'Shaft of Light'" – Eliot House Senior Common Room, Harvard University, Cambridge, MA

1998   "Toys with Character" – Tokyo Toy Show, Tokyo, Japan

1996   "Making 'Shaft of Light'" – Uppsala International Short Film Festival, Uppsala, Sweden

MISCELLANEOUS:

2001-03   Member, College Art Association

2002   Roundtable participant, "At the Intersection of Art and Science," Southern California Conference on Undergraduate Research, CalTech, Pasadena, CA

2002   Reviewer, International Journal of Human-Computer Studies, Special Issue on Applications of Affective Computing in Human-Computer Interaction

1992-95   Director of two theatrical productions and actor in four others at Harvard and CalArts

1994   Lighting Designer, Spring Show, Harvard-Radcliffe Dance Club

1994   Tech Crew, Hasty Pudding Theatricals' 146th Annual Show – "A Forum Affair"

Proficient with a wide variety of film, video and digital equipment.

Proficient with many major software packages.

SELECTED REVIEWS:

"The Intimate Machine," Scientific American Frontiers, Host: Alan Alda, 10/22/02

"Pet Tech," Scientific American Frontiers, Host: Alan Alda, 10/16/01

"Fresh Gear," Tech TV, 9/22/01

"Dancing with virtual wolves," A. Hermida, news.bbc.co.uk, 9/10/01

"Gadgetry Still Dazzles at Tech Conference, But Tech Slump Affects Turnout," M. P. Grenier, The Wall Street Journal, 8/22/01

"Growls and howls hit graphics show," M. P. Grenier, ZDNet, 8/22/01

"Where the Mona Lisa Meets the Motherboard," G. Gaslin, LA Times, 8/17/01

"SIGGRAPH 2001 – is experimentation really dangerous?" www.interactionbydesign.com, 8/17/01

"Computer Developers Aiming to Exterminate the Mouse," A. Pham, LA Times, 8/14/01

"Feeling the virtual force in LA," T. Logan, news.bbc.co.uk, 8/12/01

"Stretching it out at SIGGRAPH," M. Stroud, www.wired.com, 8/11/01

"New World Interface," K. Miller, New Times LA, 8/2/01

"Not Just Fun and Games," C. Shepherd, E3 Show Daily, 5/18/01

"Exposure," Sci-Fi Channel, Host: Lisa Marie, 4/28/01

"Banff Media Institute Living Architectures," Leonardo Electronic Archive, Vol. 8, No. 12, 12/06/00

"Banff living architectures summit," M. Locke, www.rhizome.org, 9/28/00

"Lights, Camera, Interaction," D. P. Mahoney, Computer Graphics World, 4/00

"Sklave oder bester Freund?" W. Lackner, 3D Live, 4/00

"High Tech Entertainment," CNN, 12/21/99

"'Thinking' game characters in development," USA Today, 8/11/99

"Philadelphia," M. Moss and R. Rice, Sculpture Magazine, 5/99

"MIT designs toys of tomorrow," R. Sykes, www.cnn.com 12/21/98

"Siggraph Exhibit Gets a Lot of Hits," K. Kaplan, LA Times, 8/11/97

"Independent Effort," E. Lotozo, Philadelphia Weekly, 5/7/97

"Critical Mass Art," R. Rice, Philadelphia City Paper, 12/4/96

"Artfronts Matter," D. Kasrel, Philadelphia City Paper, 11/28/96

"Young filmmaker brings talents home," C. McGroarty, Philadelphia Inquirer, 8/18/95