

Amon D. Millner

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1 Personal Information

1.A Education

- 6/2003 – 9/2010 Massachusetts Institute of Technology
M.S, Ph.D. Media Arts and Sciences, advisor: Dr. Mitchel Resnick
Dissertation title: Computer as Chalk: Cultivating and Sustaining
Communities of Youth as Designers of Tangible User Interfaces
- 8/2001 – 5/2003 Georgia Institute of Technology
M.S. Human Computer Interactions
- 8/1997 – 5/2001 University of Southern California
B.S. Computer Science

1.B Employment Background

- 09/2012 – present Visiting Assistant Professor of Computing Innovation
- 09/2010 – 08/2012 Computing Innovation Post-doctoral Fellow, Lynn Andrea Stein
Franklin W. Olin College of Engineering, Needham, MA
- 03/2011 – present Visiting Scientist
- 08/2010 – 02/2011 Research Affiliate
- 06/2003 – 08/2010 Research Assistant to Mitchel Resnick
MIT Media Lab, Lifelong Kindergarten Group, Cambridge, MA
- 09/2010 – present Co-founder, Learning Lead
Modkit, LLC, Cambridge, MA
- 08/2001 – 05/2003 Research Assistant to Amy Bruckman
Georgia Tech College of Computing, Atlanta, GA
- 05/2002 – 08/2002 Graduate Research Intern to David Millen
IBM TJ Watson Research Center, CUE Group, Cambridge, MA
- 05/2001 – 08/2001 Graduate Technical Intern to Bruce Williams
Intel Corporation, ASIC Group, Beaverton, OR

2 Research, Scholarly, and Creative Activities

2.A Journal Articles

- Shaer, O., **Millner, A.**, Hummels, C. (2012). "Trajectories in TEI: Reflecting on the Evolution of Ideas, Innovators, and Interactions." ACM Interactions. XIX.6 November+December. 12-17
- Resnick, M., Maloney, J., Monroy-Hernandez, A., Rusk, N., Eastmond, E., Brennan, K., **Millner, A.**, Rosenbaum, E., Silver, J., Silverman, B., Kafai, Y.

(2009). "Scratch: Programming for All." *Communications of the ACM*. 52(11). 60-67

2.B. Refereed Conference Publications

- **Millner, A.** (2012). "Computer as Chalk: Supporting Youth as Designers of Tangible User Interfaces." Proceedings of the Constructionism 2012 conference. Athens, Greece
- **Millner, A.**, Baafi, E. (2011). "Modkit: Blending and Extending Approachable Platforms for Creating Computer Programs and Interactive Objects." Proceedings of the 2011 ACM Interaction Design and Children conference. Ann Arbor, MI
- Baafi, E., **Millner, A.** (2011). "A Toolkit for Tinkering with Tangibles & Connecting Communities." Proceedings of the 2011 ACM Tangible Embedded & Embodied Interaction conference. Madeira, Portugal
- **Millner, A.** (2008). "Supporting Children as They Program to Make Physical and Virtual Objects Interact." Proceedings of the 2008 ACM Interaction Design and Children conference. Evanston, IL. 25-28
- Barron, B., Kafai, Y., Josephs, D., Pinkard, N., Resnick, M., Martin, C., Schatz, C., Shapiro, B., **Millner, A.**, Peppler, K., Chiu, G., and Desai, S. (2006). "Clubs, Homes, and Online Communities as Contexts for Engaging Youth in Technology Fluency Building Activities." Symposium and proceedings published in the 2006 International Conference of the Learning Sciences, Bloomington, IN. 1022-1028
- Zigelbaum, J., **Millner, A.**, Desai, B. & Ishii, H. (2006). "Bodybeats: Whole-body, Musical Interfaces for Children." Work-in-progress/poster paper in Proceedings of the 2006 Conference on Human Factors in Computing Systems (CHI), Montreal, Quebec, Canada. 1595-1600

2.C Book Chapters

- **Millner, A.** (2009) "Interface Designs with Hook-ups." *The Computer Clubhouse: Constructionism and Creativity in Youth Communities*. Kafai, Y. Peppler, K., Chapman, R., eds. Teachers College Press. New York, NY. 58-70
- **Millner, A.**, Daily, S. (2008). "Creating an Educational Ecosystem for Design, Personal Fabrication, and Invention." *Communities of Practice: Creating Learning Environments for Educators*. Kimble, C. & Hildreth, P., eds. Information Age Publishing. Charlotte, NC, USA. 403-428

2.D Reports

- **Millner, A.** (2010). "Computer as Chalk: Cultivating and Sustaining Communities of Youth as Designers of Tangible User Interfaces." Media Lab Ph.D. dissertation. Massachusetts Institute of Technology. Cambridge, MA
- **Millner, A.** (2005). "Hook-ups: How Youth Learn Through Creating Physical Computer Interfaces." Media Lab master's thesis. Massachusetts Institute of Technology, Cambridge, MA

2.E Refereed Workshops

- **Millner, A.**, Huang, W., Corbett, C. (2013). "Creating Opportunities for Young Learners with Hearing Impairments to Program, Design, and Learn Language in New Ways." Workshop on Designing for and with Children with Special Needs in Multiple Settings. *Interaction Design and Children 2013*. New York, NY

- **Millner, A.** (2005). "The Hook-ups Initiative: How Youth Can Learn by Creating Their Own Computer Interfaces and Programs." SIGGROUP Bull., 24 (3), 85-89

2.F Grants and Contracts

- Pilot co-designer, co-author of proposal, "Made-by Café"
 - Sponsor: The Simon Group
 - Total Award Amount: 1000 sq ft store front gifted for 1-year to pilot programs
 - Duration: 04/2013 – 04/2014
- Post-doctoral Researcher, author of proposal, "Computing Innovation Fellows Project" subaward (CIF-C-63 of NSF-1019343)
 - Principal investigator: Lynn Andrea Stein, Olin College
 - Sponsor: Computing Research Association, National Science Foundation
 - Total Award Amount: \$127.5K
 - Duration: 9/2011 – 8/2012
- Post-doctoral Researcher, author of proposal, "Computing Innovation Fellows Project," subaward (CIF-B-63 of NSF-1019343)
 - Principal investigator: Lynn Andrea Stein (Olin College)
 - Sponsor: Computing Research Association, National Science Foundation
 - Total Award Amount: \$140K
 - Duration: 9/2010 – 8/2011
- Technology Consultant, "Ready for Robotics: The Missing 'T' and 'E' of Early Childhood Education" (DRL-1118897)
 - Principal investigator: Marina Bers, Tufts University
 - Sponsor: National Science Foundation
 - Total Award Amount: \$408K
 - Duration: 2011 – 2014
- Research Staff, co-author of proposal, "Computer Programming Tools in Schools: Is Now the Time?" for "Approaches and Resources to Advance the Intellectual Basis for a National Homeland Security S&T Workforce" BAA09-07
 - Principal investigators: Eric Klopfer, MIT and George Reese, UIUC
 - Sponsor: Department of Homeland Security
 - Total Award Amount: \$170K
 - Duration: 1/2011 – 7/2012
- Program Co-coordinator, "The Learn 2 Teach, Teach 2 Learn program."
 - Principal investigator: Melvin H. King, South End Technology Center
 - Sponsors: Various funding agencies (e.g., the Massachusetts Cultural Council and the American Honda Foundation)
 - Total Award Amount: grants ranging from \$10K-75K each
 - Duration: 2004 – present
- Collaborator, "Scratch & Share: Collaborating with Youth to Develop the Next Generation of Creative Software."
 - Principal investigator: Mitchel Resnick, MIT
 - Sponsor: MacArthur Foundation Digital Media and Learning Competition
 - Total Award Amount: \$190K
 - Duration: 2010 – 2012
- Graduate Research Assistant, Fellow "Center for Bits and Atoms" (NSF CCR-0122419)

- Principal Investigator: Neil Gershenfeld, MIT
- Sponsor: National Science Foundation Computer and Computation Research Center
- Total Award Amount: \$14M
- Duration: 2001 – 2009
- Graduate Research Assistant “[Scratch:] A Networked, Media-Rich Programming Environment to Enhance Informal Learning and Technological Fluency at Community Technology Centers” (NSF TR-0325828)
 - Principal investigators: Mitchel Resnick, MIT; Yasmin Kafai, UCLA; and John Maeda, MIT
 - Sponsor: National Science Foundation Information Technology Research
 - Total Award Amount: \$2M
 - Duration: 2003 – 2008
- Adviser “Strategies: Bridging Math Literacy and Digital Media Creation: Students as Learners, Teachers, and Leaders of STEM Content” (ITEST Award-1031633)
 - Principle Investigator: Chad Milner, The Young People’s Project
 - Sponsor: National Science Foundation
 - Total Award Amount: \$351K
 - Duration: 2011 – 2014

2.G Provisional Patents

- “Identifying and Providing Physical Social Actions to a Social Networking System” inventors: Ryan, T., Huang, J., Booth, P., McKay, J., Moon, S., Seger M., **Millner, A.**, Deng, P., Marra, C., Thomson, S., Marra, G. Provisional granted 11/2012

2.H Commercialized Technology

- Scratch Sensor Board / Picoboard
 - <https://www.sparkfun.com/products/10311>
- Modkit MotoProto Shield
 - <https://www.sparkfun.com/products/10018>

2.I Fellowships, Prizes, Honors, and Awards

- Computing Research Association Computing Innovation Fellow Award (2010-12)
- MIT Center for Bits and Atoms Fellow (2004-09)
- National Consortium for Graduate Degrees for Minorities in Engineering & Science Fellow – GEM (2003-08)
- Intel Fellow (2000-03)
- Upsilon Pi Epsilon Honor Society initiate, Nu Beta chapter (2001)
- Order of Omega Honor Society initiate, Omega Phi chapter (2000)
- Ronald E. McNair Scholar (1999)
- MAKE Editors’ Choice Award / Education Award for Modkit (05/2011)
- Featured instructables.com contribution “Make Skee-ball-inspired Games Using Pizza Boxes, Party Favors, and a PC” (12/2008)
- MAKE Editor’s Choice Award “Heads on Fire Fab Lab Maker Faire interactive exhibit” (05/2008)

2.J Talks

2.J.i Invited Talks

- “Tangible Interfaces and Learning in the Age of Digital Everywhere,” New Jersey Institute of Technology Information Systems Department, Newark, NJ (02/2013)
- “Computer as Chalk,” Constructionism 2012, Athens Greece (08/2012)
- “Creating Constructions Kits for Kids” With Tseng, T., Sketching in Hardware 5, Portland, OR (07/2012)
- “Emerging Makers, Emerging Markets,” Addressing Skill Gaps through Media Event, Providence, RI (02/2012)
- “M-powerment: Motivating the Masses to Make with Modkit.” With Baafi, E., Sketching in Hardware 4, Philadelphia, PA (07/2011)
- "All-Around Engineering," Technology and Culture Seminar Series at Franklin W. Olin College of Engineering, Needham, MA (11/2010)
- "FabFolk," Building Community Session at International Fab Lab Conference, The Netherlands (08/2010)
- "Reimagining Scratch, Reimagining Learning" Keynote address with Resnick, M., Brennan, K., and Monroy-Hernandez, A., Scratch@MIT Conference, Cambridge, MA (08/2010)
- "Young People Developing as 'Hook-ups' Designers: Transforming Trash into Interactive Experiences by Hooking up Physical and Digital Media," Center for Engineering, Education, and Outreach Seminar Series at Tufts University, Medford, MA (02/2010)
- “Teens, Fab Labs, Scratch and Arduinos.” With Baafi, E., Sketching in Hardware 3, Providence, RI (07/2008)
- “Meet a Maker” brown-bag lunch seminar, Department of Art at University of Minnesota, Minneapolis, MN (10/2007)
- “How and Why Kids Around the World Make Hook-ups.” With Silver, J., & Monroy-Hernandez, A., Omar Dengo Foundation, San Jose, Costa Rica (01/2007)
- “Making a Difference in Many Learning Settings,” 20th Anniversary Alumni Reunion, MIT Media Lab, Cambridge, MA (10/2005)
- “Learning In and From Fab Labs,” Symposium on Digital Fabrication, Tromso, Norway (08/2005)

2.J.ii Panels

- “Are Badges the Answer? Perspectives on Motivation for Lifelong Learning”
- with Rusk, N., Kaplan, A., and Resnick, M., Digital Media and Learning Conference 2012, San Francisco, CA (03/2012)
- "My Path Through a 2-year Postdoc, Part 2" Alternative Career Path panel at the Academic Workshop for Underrepresented Junior Faculty and Senior Graduate Students, Georgia Institute of Technology, Atlanta, GA (02/2012)
- “Designing Learning Experiences” with Peth, D. and Boni, M., Refresh Boston, Cambridge, MA (9/2011)
- "My Path Through a 2-year Postdoc" Alternative Career Path panel at the Academic Workshop for Underrepresented Junior Faculty and Senior Graduate Students, University of Southern California, Los Angeles, CA (02/2011)
- "Constructionists Under Construction" panel at Constructionism 2010, Paris, France (08/2010)

- "The Computer Clubhouse Learning Model: Learning Inquiry, Collaboration, and the Development of 21st-Century Skills in Informal Learning Spaces" Symposium with Peppler, K., Kafai, Y., Rusk, N., Beals, L., Bers, M., Breslow, G., Chapman, R., Martin, C., Barron, B., Wise, S., Rusk, N., Resnick, M., Cooke, S., Sylvan, E., & Cole, M., at the American Educational Research Association (AERA) Annual Meeting, San Diego, CA (04/2009)
- "Promoting the Success of Minority Graduate Students" with Gilbert, J., da Silva, D., Chapman, R., Love, N., & Daily, S., panel moderator at the American Association for the Advancement of Science Annual Meeting, Boston, MA (02/2008)
- "Informal Introduction to Computing for Children" with Schanzer, E., Slater, D., Garber, R., Monroy-Hernandez, A., & Silver, J., Informatics, Mathematics, and ICT conference, Boston, MA (06/2007)

2.J.iii Guest Lectures

- "Toolkits for Connecting the Physical and Digital Worlds" Guest lecturer for Orit Shaer's "Tangible User Interfaces" course at Wellesley College, Wellesley, MA (4/2011)
- "Microcode" Guest specialist for the How to Make (Almost) Anything course at the Massachusetts Institute of Technology, Cambridge, MA (2009 – 2011)
- "Tools to Make With" Guest lecturer for Diane Willow's "New Media: Making Art Interactive" course at the University of Minnesota Department of Art, Minneapolis, MN (10/2007)
- "Computer Clubhouses and Fab Labs and Beyond" Guest lecturer for Yasmin Kafai's "Culture, Technology, and Equity" course at the Harvard University Graduate School of Education, Cambridge, MA (11/2006)
- "Adventures with Scratch" Guest lecturer for Kathryn Bielaczyc's "Technology and Assessment" course at the Harvard University Graduate School of Education, Cambridge, MA (03/2005)

2.K Interactive Exhibits and Demonstrations

- Multiple Modkit interactive mini-projects featuring pushbuttons and servo motors at Make-to-learn Symposium/Digital Media and Learning Conference, Chicago, IL (03/2013)
- "Interactive Puppetry" at GE Garages (09/2012)
- "Pets of the Programmable Park" at Boston Children's Museum (08/2012)
- "DIY auto-hand-dryer demonstration" at the Interaction Design and Children Conference, Ann Arbor, MI (06/2011)
- Multiple Modkit interactive mini-projects at Maker Faire Bay Area, San Mateo, CA (05/2010 and 05/2011)
- "Hands-on Fabrication with the Heads on Fire Fab Lab" at the Maker Faire Bay Area, San Mateo, CA (05/2008)
- "Bone Xylophone + Interactive Halloween Projects with the Scratch Sensor Board" at the Maker Faire Austin, Austin, TX (10/2007)
- "Collaborative Workshop on Wheels – the Mobile Fab Lab" at Gadgetoff, Newark, NJ (09/2007)
- "Scratch Patches in Action – interactive fishing (demonstration)" Interaction Design and Children Conference, Boulder, CO (06/2005)

2.L Reviewing Activities

2.L.i Conference Chair Positions

- Tangible, Embedded, and Embodied Interactions (TEI) Graduate Student Consortium co-chair (2012)
- Tangible, Embedded, and Embodied Interactions Studio track co-chair and reviewer (2010)

2.L.ii Reviewing: Journals

- Journal of the Learning Sciences reviewer (2007)

2.L.iii Reviewing: Conferences

- Interaction Design and Children (IDC) reviewer (2012, 2008)
- Open Hardware Summit reviewer (2011-12)
- Tangible, Embedded, and Embodied Interactions reviewer (2011-12)

2.L.iv Reviewing: Books

- Communities of Practice: Creating Learning Environments for Educators chapter (2006)

3 Teaching, Mentoring, Advising, and Facilitating Learning

3.A Courses Taught in the Last Five Years

- Olin College ENGR 2210: “Principles of Engineering”
 - Spring 2013 (enrollment 21)
 - Fall 2012 (section enrollment 19 of 63)
- Olin College ENGR 4190: “Senior Capstone Project in Engineering”
 - Fall 2012/Spring 2013 faculty adviser, Facebook team of 6 students
 - Fall 2012/Spring 2013 faculty adviser, Autodesk team of 7 students
 - Fall 2011/Spring 2012 faculty adviser, athenahealth team of 7 students
- Olin College ENGR 3220: “Human Factors and Interface Design”
 - Fall 2012 co-instructor with S. Bator (enrollment 40)
 - Fall 2011 co-instructor with L.A. Stein (enrollment 40)
- Olin College ENGR 2599a: “Computing and Craft”
 - Spring 2012 (enrollment 6)
 - Spring 2011 (enrollment 12)
- Wellesley College EXT D 160: “Introduction to Engineering”
 - Spring 2011 co-instructor with F. Turbak, and C. Rogers [Tufts] (enrollment 9)
- Olin College ENGR 1200: “Design Nature”
 - Fall 2010 Studio Coach for instructors O. Eris, C. Lee, and R. Camp (enrollment 92)

3.A.i Other Contributions to Teaching

- Olin College co-curricular: “Gender and Engineering”
 - Fall 2011 with Y. Zastavker, D. Chachra et. al (drop-in range 3 – 9)
- MIT MAS 863: “How to Make (Almost) Anything”
 - Fall 2008 Guru/Special Assistant to Neil Gershenfeld
 - Fall 2007 Guru/Special Assistant to Neil Gershenfeld

- Fall 2006 Teaching Assistant to Neil Gershenfeld
- Fall 2005 Teaching Assistant to Neil Gershenfeld
- FALL 2005, 2006, 2007*, and 2008*
- MIT MAS 712: “Special Topics in Technological Tools for Learning”
 - Spring 2006 Teaching Assistant to Mitchel Resnick

3.B Course or Curriculum Development

3.B.i College Courses Developed

- Olin College ENGR 2599a Computing and Craft

3.B.ii K-12 Formal Curricula

- Computer Programming Tools in Schools
 - Reach: piloted in 10 Massachusetts schools
 - Pilot duration: 2011 - 2013

3.B.iii K-12 Informal Institutes, Programs, and Workshop Series

- **Learn 2 Teach, Teach 2 Learn** at the South End Technology Center, Boston, MA
 - Role: co-coordinator
 - Description: a model for teens (typically from underserved neighborhoods) teaching younger peers about technology. Youth are hired, paid as teachers and community project developers
 - Impact: over 300 teen hires have taught over 3000 younger students. More than ninety percent of our students go on to pursue post-secondary education opportunities – the majority in engineering-related fields
 - Program duration: 2004 – present
- **FAB Kidz** at the South Shore SDA School / South End Technology Center
 - Role: curriculum developer and co-instructor with M. Stephenson
 - Description: An extension to the math curriculum that enabled students to explore concepts such as geometry in the context of fabricating their own projects
 - Duration: 2008 (8 participants aged 6 – 14)
- **Invention and Design** workshop series at the South End Technology Center, Boston, MA
 - Duration: 2005 (~6 youth dropped in regularly)
- **Technical Outreach Community Help** (TORCH) Center for the National Society of Black Engineers (NSBE) Alumni Chapter in Atlanta, GA
 - Duration: 2002 (~7 youth dropped in regularly)
- **Non-traditional leaders** program at 32nd Street School, Los Angeles, CA
 - Duration: 2000 (10 3rd to 5th grade participants)
- **Math Engineering Science Achievement** (MESA) USC and 32nd Street School
 - Duration: 1999 (MESA competition coach for ~20 students)

3.C Professional Development Workshops

I have run over 100 professional development workshops. The following list includes one sample workshop for a given calendar year.

- “Scratch, Starlogo, and Etoys” Computer Programming Tools in Schools Workshop for Teachers, Cambridge, MA (08/2011, 03/2012, and 08/2012)

- “Scratch – Clubhouse Edition” and “Stop Motion Animation” Computer Clubhouse Network Annual Conference, Atlanta, GA (04/2010)
- “Scratch: Visual Programming for Anyone” Massachusetts Computer Using Educators Technology Conference, Foxboro, MA (10/2009)
- “Scratch: Visual Programming for Anyone” O’Reilly Emerging Technology Conference, San Jose, CA (03/2008)
- “Fab for Kids” 4th International Fab Lab Forum, Chicago, IL (08/2007)
- “Physical Play, Programming, and Interactive Toys” Computer Clubhouse Annual Conference, Mexico City, Mexico (05/2006)
- “Hands on with Hook-ups” Innovative Design Experiences After School (IDEAS), Cambridge, MA (06/2005)
- “Hands on with Hook-ups” Rhode Island School of the Future, Providence, RI (11/2004)

3.D Learning Lab Network Development

- Fab Labs
 - Roles: lab scout, set up team, education team, network expansion team
Description: community-based labs that put personal fabrication within reach for makers of all ages.
 - Reach: currently, almost 200 Labs are in operation around the world
 - Duration: 2001 - present
- Computer Clubhouses
 - Roles: workshop lead, mentor, professional development consultant
 - Description: after-school centers that offer members of low-income communities access to an array of computer technology outfitted with a professional suite of design software and mentorship
 - Reach: currently roughly 100 Clubhouses operate across 20 countries
 - Duration: 1997 - present

3.E Advising

3.E.i Graduate Students

- Fawn Qiu (Harvard, MS, Education) Spring 2012
 - Project topic: soft-circuits
- Chris Connors (Leslie University, MS Education) Fall 2011
 - Project topic: Supporting MAKE activities in classrooms

3.E.ii Undergraduates

- Andrea Cuadra (Olin College, Interaction Design) Fall 2011 – Spring 2013
 - Project topics: tangible embedded interaction
- Chinua Shaw (MIT, Electrical Engineering and Computer Science) Spring 2010
 - Project topic: tangible user interface creation in informal settings
- Alexandra Olivier (Wellesley College, Computer Science) Spring 2009
 - Project topic: tangible user interface creation in informal settings
- Paul Medlock-Walton (MIT, Electrical Engineering and Computer Science) Spring 2007 – Fall 2007
 - Project topics: Scratch Sensor Board, virtual sensor board, podcasts
- Grant Oladipo (MIT, Electrical Engineering and Computer Science) Fall 2007
 - Project topic: tangible user interface creation in informal settings

- Michael Stern (MIT, Mechanical Engineering) Summer 2008
 - Project topic: digital Fabrication courses for youth at Fab Labs
- Joseph Brown (MIT, Mechanical Engineering and Design) Summer 2004 – Summer 2007
 - Project topic: digital Fabrication courses for youth at Fab Labs
- Andrew Harlan (MIT, Mechanical Engineering) Spring 2005
 - Project topic: re-designs for Scratch Patch puzzle-piece controllers
- Adrian Adames (MIT, Mechanical Engineering) Summer 2007
 - Project topic: tangible user interface creation in informal settings
- Elizabeth Ricker (MIT, Brain and Cognitive Science) Summer 2007 - Spring 2008
 - Project topic: tangible user interface creation in informal settings
- Michelle Aquing (MIT, Chemical Engineering) Summer 2007 – Fall 2007
 - Project topic: tangible user interface creation in informal settings
- Christina Miller (Wellesley College, Physics) Summer 2007
 - Project topic: virtual Scratch Sensor Board
- Margaret Clemens (Boston University, Computer Science and Psychology) Summer 2007 – Summer 2008
 - Project topic: Scratch Sensor Board

4 Service

4.A Reviewing Activities for Agencies and National Organizations

- Meeting participant, Badge-based STEM Assessment: Current Terrain and the Road Ahead, National Science Foundation (NSF) and the New York Hall of Science, Spring 2013
- Review panelist, National Science Foundation (NSF) grant panel reviewer, Directorate for Computer and Information Science and Engineering (CISE), Spring 2011

4.B Campus

- Co-founder, MIT CONVERGE graduate preview weekend for underrepresented students; established 2004, currently an on-going program supported by MIT
- Resident Adviser, MIT Independent Living Group (2005-2009)
- Georgia Tech FOCUS Volunteer, Atlanta, GA (2002)

4.C Extended Community

- Founding board member and Vice President, Fab Folk Inc 501(c)3 non-profit 2009 – present