

BENJAMIN A. LEDUC-MILLS

AT THE INTERSECTION OF
USER EXPERIENCE, DESIGN, AND CODE

CONTACT

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Portfolio, Code, & Full CV @
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EDUCATION

Ph.D, Computer Science 2014
University of Colorado, Boulder
Concentration: Human-Computer Interaction
Advisor: Michael Eisenberg
Thesis: : "Embodied Fabrication:
Body-Centric Devices for Novice Designers"

M.P.S, Interactive Telecommunications 2008
New York University, Tisch School of the Arts
Thesis: "MAPP: Mechanical Art Production
Platform"

B.A., Philosophy 2003
University of California, Santa Cruz
Highest Honors

SELECTED PUBLICATIONS

Developing an Elementary Engineering
Education Program through Problem-Based
Wearable Technologies Activities
Barker, B., et al.
Book Chapter, Handbook of Research on
Wearable and Mobile Technologies in
Education, J. Holland(Ed.), IGI Press. 2015

Lending a Hand: Supporting the Maker
Movement in Academic Libraries
Rogers, A., O'Connell, B., and Leduc-Mills, B
ASEE 2015, Seattle, WA USA.

PopCad: Towards Paper-Based Fabrication
Tools for Children
Leduc-Mills, B. and Eisenberg, M.
FabLearn 2014, Stanford, CA USA.

Embodied Fabrication: Body-Centric
Tangibles for Digital Making
Leduc-Mills, B.
FabLearn 2013, Stanford, CA USA.

Seeing Solids via Patterns of Light:
Evaluating a Tangible Input Device
Leduc-Mills, B., Profita, H., and Eisenberg, M.
Digital Fabrication for Educational Contexts
Workshop, IDC 2012, Bremen, Germany.

The UCube: A Child-Friendly Device for
Introductory Three-Dimensional Design
Leduc-Mills, B. and Eisenberg, M
ACM IDC, June 20-23, 2011, Ann Arbor, USA.

RELATED EXPERIENCE

SENIOR EXPERIENCE DESIGN RESEARCHER @ AUTODESK, INC.
OCTOBER 2019 – CURRENT | SAN FRANCISCO, CA

Working within the Platform Services and Components group as a senior researcher, I lead cross-functional groups through strategic and tactical research to improve the experience of developers using Autodesk's cloud API's. Achievements include building the research discipline with the discipline lead from the ground up for a 600 person team, including research processes and practices, building a research tracking system, and teaching research fundamentals workshops to level-up colleagues' research skills. Fluent in a wide array of qualitative and quantitative methods, I work to use mixed methods research to tell the story and back it up with data.

SENIOR EXPERIENCE ENGINEER @ AUTODESK, INC.
MARCH 2017 – SEPTEMBER 2019 | SAN FRANCISCO, CA

Principal experience engineer on EAGLE (a desktop electronics design program). Tasked with delivering the user experience, I conducted user research, created visual prototypes, provided guidance and design reviews, and added new features and code to the software myself. During my tenure EAGLE underwent a visual transformation, coming into line with Autodesk's HIG, adding over 1500 new lines of CSS and over 300 new icons, high-dpi display support, and the introduction of numerous new core features (object inspector, design manager, selection filters, etc.).

USER RESEARCH & SOFTWARE PROTOTYPING @ GOOGLE, INC.
NOVEMBER 2015 – MARCH 2017 | MOUNTAIN VIEW, CA | VIA ADECCO

Member of ATAP (Advanced Technology and Projects) working on Project Soli – a radar sensor platform enabling gestural interaction with embedded devices. Responsibilities included managing user research of core needs, building coded prototypes, data analytics for UX testing, running a small team developing protocols for sensor integration, managing research initiatives, and contributing to Soli's Developer Kit.

R&D SWISS ARMY KNIFE @ SPARKFUN ELECTRONICS
MAY 2011 – OCTOBER 2015 | NIWOT, CO

Worked in the education department at SparkFun to research and develop all aspects of a supported consumer product: design and execution of user research, routing circuit boards, writing code, and producing documentation. Other responsibilities included publishing and presenting research and teaching workshops. As part of a task force to develop new hardware for the Internet of Things, our group researched, designed, and released eight new products in 2015.

HONORS | AWARDS | EXHIBITIONS

Guest Faculty Fellow, Constructing Modern Knowledge, Manchester, NH	2016
Presidential Fellowship, Visiting Faculty, Wabash College, Crawfordsville, IN	2016
"Open Hardware, Open Minds..." , Invited Talk, Open Hardware Summit	2015
SWSXEdu Panel: "Game Changers: Tools for Constructivist Learning", Organizer & Moderator	2015
SparkFun Electronics Graduate Fellow, University of Colorado, Boulder	2012-2014
Dean's Outstanding Merit Fellowship, College of Engineering and Applied Science, University of Colorado	2010-2011
Nokia Invited Lecture on Mobile & Future Technologies, Georgia Tech	2012
Featured Exhibition, Untitled #49 (Ideate), Denver Art Museum	2012
Exhibition Installation (SADbot) at ArtBots 2011, Gent, Belgium	2011
Featured Project at "Dance Robot Dance: An Evening with Maker Faire", Internet Week NYC	2010
Yahoo! Design Expo, Highest Social Design Value Award (Click)	2008
Grand Prize Winner, Digital Incubator Competition from MTVU and Cisco Systems \$30,000 grant as a finalist, \$100,000 Grand Prize	2007