Michael Warren Skirpan

CONTACT 440 S. 45th St. Boulder, CO 80305 608-886-2295

Information Boulder, CO 80305 michael.skirpan@colorado.edu

Website mwskirpan.com

EDUCATION University of Colorado - Boulder, Boulder, CO

Ph.D. Candidate, Computer Science, Expected: Spring 2017

• Research Focus: Data Ethics and Public Communication of CS / Data Art

• Advisor: Tom Yeh, Ph.D.

University of Pittsburgh, Pittsburgh, PA

B.Phil., Philosophy (Honors), May 2010

B.S., Economics (minor: Physics), May 2010

RECENT PROFESSIONAL EXPERIENCE

University of Wisconsin - Madison

AY 2016-17

Software Engineer and Designer of web application for multi-institutional NSF-funded educational research project. EQUIP is an app used by educational researchers and teachers to gather observational data and understand equality and social dynamics in classroom participation.

Quantified Self Immersive Theatre and Interactive Art Production

2016

Writer, Producer, Interaction Designer, and Project Lead on 35 person team for Knight Foundation grant to produce Quantified Self - an immersive and interactive performance about the future and ethics of personal data in our society

Inclusive Design Institute

Summer 2016

Google Summer of Code project researching and implementing interactive data dashboard for rapidly creating and sharing accessible data visualizations.

Fast Forward Labs Summer 2015

Graduate Intern doing researching, implementing, and writing report on the nearfuture possibilities and ethics around Deep Learning. See the Deep Neural Net Image Classification system we built at http://www.pictograph.us

CU-Boulder: Teaching

Spring 2014 - Fall 2015

Democracy in the Digital Era (self-designed and taught course)

User-Centered Design II (co-instructor with Tom Yeh)

HCC: Big Data (co-instructor with Tom Yeh)

Education Psychology and Adolescent Development (instructional staff with Kris Gutierrez)

Logan School for Creative Learning

Summer 2014 - 2015

Summer Camp Activity Design and Counselor (Hands-on Science Programs)

University of Pittsburgh, LRDC: Research Associate May 2011 - January 2013
Research Assistant to Julie Fiez doing Web Development, Data Analysis, and Experimental Design

Publications

- 1. **Ohm, Paul, Skirpan, Michael** [Currently Under Review] "The Problem with Performance: The Humans are Going to Lose," *Proceedings of We Robot*, 2017.
- 2. Skirpan, Michael, Cameron, Jacqueline, Yeh, Tom [Currently Under Review] "Quantified Self: Theater-Integrated Data Interactions to Engage Users in Ethical Conversations About the Use of Personal Data Online," *Proceedings of SIG-CHI*, 2017.
- 3. **Skirpan, M., Yeh, T.** "Beyond the Flipped Classroom: Learning by Doing Through Challenges and Hack-a-thons" *Proceedings of ACM: SIGCSE Conference* 2015, 2015.
- Skirpan, M. "Learning How to Learn: An Essay on the Philosophy of Education" Diss., University of Pittsburgh, 2011.

ARTISTIC PORTFOLIO

• Data Artist, Flow

- Ars Electronica, 2016
- Playwright and Interaction Design, Quantified Self Knight News Challenge, 2016
- Data Artist and Designer, Fireflies

ATLAS Lobby installation, 2015-16

AWARDS

- John S. and James L. Knight Foundation's News Challenge on Data Winner 2016
- Engineering Excellence Fund, Major Award Engineering and Art Grant 2015-2016
- Chancellor's Fellowship for Excellence in STEM Education AY 2014-15
- Engineering Excellence Fund, Minor Award ATLAS Lobby Installation Fall 2014
- Dean's Fellowship for BPhil Thesis

Summer 2009

OUTREACH

- Project Advisor for CU Boulder CS Senior Project Team Students for Instructional Improvement
 AY 2015-16
- Boulder Country Day School: Technology Curriculum Development Fall 2014 Spring 2015
- Alicia Sanchez Elementary School: After-school Program Design and Support Fall 2013 - Spring 2014

HARDWARE AND SOFTWARE SKILLS

- Programming Languages: Python, JavaScript, C, C++, Bash
- Software Skills Web Technologies: React, NodeJS, CSS/Sass, jQuery, D3, ProcessingJS
 - System Administration: Linux (Debian and Ubuntu), Nginx, Docker
 - Hardware: Arduino, ARM/PIC Microcontrollers, Raspberry Pi
 - Creative Technologies: Processing, TouchDesigner, OpenFrameworks