



CÉSAR ARMANDO TORRES

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STATEMENT

My current research projects explore digital fabrication technologies as exciting, critical new media. In particular, I am interested in computational design tools that aim to expand aesthetics and design practices as a vehicle for more engaging STEM education.

EDUCATION

PhD Program in Computer Science,
Designated Emphasis in New Media
Advisor: Eric Paulos, Berkeley Center for New Media
University of California Berkeley, Berkeley, CA
Jul 2013 - exp. Jun 2019

Bachelor of Arts, *Art Practice*
Bachelor of Science, *Computer Science [HCI]*
Advisors: Gail Wight & Scott Klemmer resp.
Stanford University, Stanford, CA
Sep 2009 - Jun 2013

WORK EXPERIENCE

Graduate Student Researcher, UC Berkeley, Berkeley, CA	Aug 2013 - Present
Freelance Graphic and Web Developer	Jun 2013 - Present
Residential Computing Consultant (RCC), Stanford University, Stanford, California	Sep 2012 - Jun 2013
Publicity and Marketing Coordinator, El Centro Chicano, Stanford, California	Sep 2010 - Dec 2013

TEACHING EXPERIENCE

Instructor, Stanford's CS1C: Introduction to Computing	Sep 2012 - Dec 2012
Instructor, Stanford's CS2C: Introduction to Multimedia Production	Jan 2013 - Mar 2013
Tutor, Creative Authoring Tools	Jan 2012 - Jun 2012
Instructor + Muralist, HeART Mural Music and Arts Project, East Palo Alto, California	Mar 2009 - Jun 2010

SERVICE EXPERIENCE

ACM Reviewer SIGCHI '15, UIST '14	
ACM Designing Interactive Systems (DIS) Student Volunteer, Vancouver, BC	Jun 2014
Berkeley Center for New Media Executive Committee - Graduate Representative	Sep 2014 - Present
Berkeley Institute of Design Seminar Coordinator (http://schedule.bid-seminar.com/)	Sep 2013 - Present

Print Design: Image as Location Festival & Conference, Berkeley, CA (http://imageaslocation.com/)	Oct 2014
Designer + Web: Hack the Bells CC by -SA 4.0 Competition, Berkeley CA (http://hackthebells.org)	Aug 2014 - Nov 2014
Designer + Web: Robots and New Media Conference, Berkeley, CA (http://robotsandnewmedia.com)	Apr 2014

FELLOWSHIPS AND AWARDS

National Science Foundation (NSF) Graduate Research Fellow "Dynamic Design for Digital Fabrication"	2014
Best Paper, ACM SIGCHI (<i>WEBZEITGEIST</i>)	2013
Adobe GEM Associate Graduate Fellow	2013
UC Berkeley Chancellor Fellow	2013
Louis Sudler Prize for Excellence in the Performing or Creative Arts	2013
Renato I. Rosaldo Community Award, Stanford University	2010, 2011

PUBLICATIONS

[2] Tim Campbell, César Torres, and Eric Paulos. **FI.UIs: Liquid Mediated Vision-Based Touch Surfaces**. To appear in Proc. of TEI'15, ACM Press (2015). [22% acceptance]. <http://fluis.cearto.com/>

[1] Ranjitha Kumar, Arvind Satyanarayan, César Torres, Maxine Lim, Salman Ahmad, Scott R. Klemmer, and Jerry O. Talton. **Webzeitgeist: Design Mining the Web**. In Proc. of CHI '13, ACM Press (2013). **BEST PAPER AWARD**. [$<1\%$ best paper; 20% acceptance]. <http://webzeitgeist.stanford.edu/>

TECHNICAL REPORTS | POSTER & DEMOS

Maxine Lim, Ranjitha Kumar, Arvind Satyanarayan, César Torres, Jerry O. Talton, and Scott R. Klemmer. **Learning Structural Semantics for the Web**. Stanford University CSTR 2012-03, November 2012.

Tim Campbell & César Torres. **FIUIs: Fluid-mediated User Interfaces**, demo at *Solid Conf.*, San Francisco, CA (2014).
César Torres. **ExpFab: Dynamic Design for Digital Fabrication**, poster at *CITRIS Research Exchange*, Berkeley, CA (2013).
César Torres. **Face recognition with resolution-enhanced stimuli**, poster at *Society of Hispanic Professional Engineers National Conference*, Cincinnati, OH (2012).

PRESS

"Forget Robots. We'll Soon Be Fusing Technology With Living Matter". Marcus Wohlsen, *Wired*. 27 May 2014

RESEARCH EXPERIENCE

GS Researcher, Tactical Hybrid Ecologies Group • Advisor - Eric Paulos Jul 2013 - Present
UC Berkeley Electrical Engineering and Computer Sciences

UG Researcher, HCI Group • Advisor - Scott Klemmer | Mentor - Ranjitha Kumar Jun 2012 - Jun 2013
Stanford Computer Science

UG Researcher, Responsive Environments Group • Advisor - Joe Paradiso | Mentor - Matt Aldrich Jun 2011 - Jun 2012
MIT Media Lab

UG Researcher, Applied Intelligence Systems Lab | Advisor - Olac Fuentes | Mentor - Daniel Rivero Jun 2010 - Jun 2011
University Texas at El Paso (UTEP) Computer Science & Psychology

MENTORING

Jasper O'Leary (Berkeley BS - CS student) 2013 - 2014

Akhila Raju (Berkeley BS - CS/CogSci student) 2013 - 2014

Carlos Angel Rivera Pagan (UPR Mayaguez BS CSE student) June 2014 - Aug 2014

Kenny Wang (Berkeley BS - CS student) 2014

Allen Li (Berkeley BS - CS student) 2014

Yipu Zheng (Berkeley BS - ME student) 2013 - 2014

EXHIBITIONS + MURALS

Engineering Career Fair, *Senior Art Show, Cummings Art Bldg, Stanford, California*. Jun 2013

Coplanar. *Cummings Art Bldg, Stanford, California*. Feb 2013

Major/Minor. *Cummings Art Building, Stanford, California*. Mar 2012

49ers/Castaño School Mural, *49ers Academy Permanent Collection, East Palo Alto, California*. Apr 2010

Adelante Raza, Community Mural, *El Centro Chicano Permanent Collection, Stanford, California*. Jun 2010

Larkin House Mural, *Larkin House Permanent Collection, Stanford, California*. Dec 2009

SKILLS

Creative authoring

Graphic design: Photoshop, Illustrator, InDesign, Omnigraffle

Video production: Premiere Pro, Final Cut Pro, Flash, SpeedGrade, iMovie, traditional stop-motion

Sound and video art: MAX/MSP, Jitter

Web development

Programming: JS, Ruby, Python, SQL, PHP

Frameworks & Libraries: Rails, JQuery, D3, Paper.js, THREE.js (WebGL)

Physical computing

Fabrication: Laser and vinyl cutting, 3D printing (FDM | Afinia Plus, uPrint)

Systems: Arduino (C++), Microsoft Kinect

Programming: C++, Java, Matlab, C, C#, OpenCV

Computational Art + Design: 3D Modelling: Rhino, Grasshopper, Inventor; Processing

COURSEWORK

Computer Science

Advanced Topic in Computer Systems - Prof. John Kubiawicz Fall 2014

Sensing, Perception, and Natural Human-Device Interaction Technologies - Achin Bhowmik, Intel Fall 2014

Computer Vision - Prof. Jitendra Malik Fall 2013

Data Visualization - Prof. Jeffrey Heer Fall 2012

Intro. to Machine Learning - Prof. Andrew Ng Fall 2012

Intro. to Artificial Intelligence - Prof. Sebastian Thrun & Prof. Peter Norvig Winter 2012

New Media

History and Theory of New Media - Prof. Gail de Kosnik Spring 2013

Technologies for Creativity and Learning - Prof. Kimiko Ryokai Spring 2013

Theory and Practice of Tangible User Interfaces - Prof. Kimiko Ryokai Fall 2013

Art, Technology, and Culture Seminar - Prof. Ken Goldberg Fall 2013

Topics in Media Studies - Prof. Gail Wight Spring 2011

Time Shifts - Camille Utterback Winter 2011