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Sarah Van Wart

APPOINTMENTS

Northwestern University, Department of Computer Science Assistant Professor of Instruction - Affiliated Faculty, CS+LS PhD Program - MBAi curriculum development effort (Summer 2020)	2020 -
Lecturer, Computer Science	2018 - 2019
EDUCATION	
University of California, Berkeley, School of Information	
PhD, Information Science	2019
- Advised by Tapan Parikh	
- Committee: Coye Cheshire, Paul Duguid, Kris Gutiérrez	
Masters (MIMS) – Information Management and Systems	2010
Yale University	
Bachelor of Arts, Economics	1999
PROFESSIONAL EXPERIENCE	
University of California, Berkeley	
Graduate Student Researcher, School of Information, UC Berkeley	2012 - 2017
Graduate Student Instructor, School of Information, UC Berkeley	2013
Lecturer, School of Information, School of Information, UC Berkeley	2012
Research Associate, School of Information, UC Berkeley	2011-2012
Web Application Developer, Geospatial Innovation Facility, UC Berkeley	2010-2011
Graduate Student Researcher, School of Information, UC Berkeley	2008-2010

Berkeley City College	
Adjunct Faculty, Multimedia Arts	2016 - 2017
REALM Charter High School	
10th grade classroom instructor – Data, Design, & Social Change	2014
URS Corporation (now AECOM)	
Senior Web Application Developer, Tallahassee, FL	2005-2008
Florida Department of Agriculture	
Software Developer, Tallahassee, FL	2002-2005

TEACHING

Northwestern Department of Computer Science

I teach courses in human-computer interaction (HCI), ethics, introductory programming, and web development.

CS 396 - Computing, Ethics, & Society

Developed course from scratch with Sepehr Vakil

- Fall (w	ith Sepehr Vakil)		2020-2021
CS 110 - Introd	duction to Computer Pr	rogramming with Python	

Re-developed course from scratch

-	Fall, Winter	2020-2021
-	Winter, Spring	2019-2020
-	Winter, Spring	2018-2019

CS 130 - Tools and Technologies of the World Wide Web

Re-developed course from scratch

-	Spring	2019-2020
_	Spring	2018-2019

CS 330 - Human Computer Interaction

-	Winter	2019-2020
_	Winter (with Nell O'Rourke)	2018-2019

UC Berkeley School of Information

Distributed Computing Applications & Infrastructure

-	Graduate Teaching Assistant (GSI)	2013
_	Summer Lecturer	2012

Berkeley City College

Designed and taught a series of web design programming courses for the professional certificate program.

Introduction to JavaScript Programming (Data Track w/ES6)	2017
Introduction to JavaScript Programming (Animation Track)	2016
Introduction to the Web Design and Web Architecture	2016

ADVISING

Northwestern University

Masters Projects

- Kimberly Chapman (Spring, 2020) Sound City App - A Tangible Technology Phonics App

Undergraduate Projects

- Yabi Ayele, web dev independent study (Fall, 2020)
- Rhea Ramaiya, Ethics Field Guide (Spring, 2020)
- Nida Pervez, web dev independent study (Winter-Spring 2020)
- Addie Rohrbach, web dev independent study (Winter, 2020)
- Katherine Johns, BreakPoint Journal (Spring, 2020)
- Titobioluwa Williams, Ethics Field Guide (Fall, 2019)
- John Drake, Fixzor (Fall, 2019)

UC Berkeley

Undergraduate research & mentoring

- Karen Goh, *Local Ground* software engineer (2015-2017)
- Lucio Lopez, Code510 researcher (2014-2017)
- Jazmin Garcia, citizen science & data science researcher (2016-2017)

Berkeley City College

Professional Bootcamp Practicum

- Megan Nelson, *Local Ground* – UX/UI, user research (2018)

- Riley Flynn, *Local Ground* software engineer, designer (2017-2018)
- John Peter McGrath, *Local Ground* software engineer (2017-2018)
- Cynthia Mah, Local Ground designer, developer, manager (2017-2018)
- Lynn Deregowski, *Local Ground* UX/UI, user research (2017)

SERVICE

Northwestern University	
Diversity Committee	2019-
Curriculum Committee	2019-
Faculty of Instruction & Post Doc Hiring Committee	2019-2020
UC Berkeley	
UC Berkeley undergraduate research apprenticeship program – mentor	2014-2017
UC Berkeley faculty hiring committee – student representative	2013
Academic	
ACM Special Interest Group on Computer Science Education (SIGCSE)	2017, 2018
Reviewer	
ACM Conference on Human Factors in Computing Systems (CHI) Reviewer	2014
Youth and Community Outreach	
East Bay College Fund – Mentor	2017-2019
Code Berkeley Student Club (Berkeley City College) – Faculty Co-Sponsor	2016-2018
Oakland High School Hacks – Mentor	2016, 2017
Code 510 - Co-Founder, Program Coordinator, and Mentor	2014-2017
Oakland Science and Math Outreach - Mentor	2013-2017

AWARDS & HONORS

Alumnae Curriculum Innovation Grant

2020-2021

- Awarded \$12,500, with Sepehr Vakil, to develop new ethics curriculum for computer science majors and minors

Computer Science Instructor of the Year

2019-2020

Journal Articles and Conference Papers (Peer Reviewed)

- Irgens, G. A., Simon, K., Wise, A., Philip, T., Olivares, M. C., Van Wart, S., ... Kahn, J. (2020). Data Literacies and Social Justice: Exploring Critical Data Literacies through Sociocultural Perspectives. In M. Gresalfi & I. . Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, Proceedings of the 14th International Conference of the Learning Sciences, Online, 21–23 July 2020* (pp. 406–413). Nashville, TN, USA: International Society of the Learning Sciences. Retrieved from https://doi.dx.org/10.22318/icls2020.406
- Matuk, C., Yoon, S., Polman, J., Barton, J., Bulalacao, N. M., Cafaro, F., ... Woods, P. (2020). Data Literacy for Social Justice. In M. Gresalfi & I. . Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, Proceedings of the 14th International Conference of the Learning Sciences, Online, 21–23 July 2020* (Vol. 1, pp. 343–349). Nashville, TN, USA: International Society of the Learning Sciences.
- Van Wart, S. J., Lanouette, K., & Parikh, T. S. (2019). Scripts and counterscripts in community-based data science: Participatory digital mapping and the pursuit of a third space. *Journal of the Learning Sciences*.
- Lanouette, K., & Van Wart, S. J. (2019). Moving Between Experience, Data and Explanation: The Role of Participatory GIS Maps in Elementary Science Sensemaking. In *Computer Supported Collaborative Learning (CSCL)* (pp. 553–556). Lyon.
- Van Wart, S. J., Lanouette, K., & Parikh, T. (2016). Local Ground: Supporting local, data-driven inquiry with youth. Poster Session Presented at the *Annual Meeting of the American Educational Research Association (AERA)*, Washington, DC.
- Lanouette, K., Van Wart, S. J., & Parikh, T. S. (2016). Supporting elementary students' learning about ecological systems through data modeling and interactive mapping in local contexts. Proceedings of the International Conference of the Learning Sciences (ICLS) (Vol. 1, pp. 570–577). Singapore.
- Van Wart, S. J. (2015). Computer Science Meets Social Studies: Embedding CS in the Study of Locally Grounded Civic Issues. *In Proceedings of the eleventh annual International Conference on International Computing Education Research* (pp. 281-282). ACM. Omaha, NE.
- Van Wart, S. J., Vakil, S., & Parikh, T. S. (2014). Apps for social justice: motivating computer science learning with design and real-world problem solving. In Proceedings of the 2014

- conference on Innovation & technology in computer science education (pp. 123-128). ACM. Uppsala, Sweden.
- Van Wart, S. J. (2013). Increasing Youth and Community Agency in GIS. *In Proceedings of GeoHCI workshop at CHI*. Paris, France.
- Van Wart, S. J., Tsai, K.J., and Parikh, T. S. (2010). Local Ground: a paper-based toolkit for documenting local geo-spatial knowledge. *In Proceedings of the First ACM Symposium on Computing for Development*, ACM. Egham, UK.

Presentations, Posters, and Book Chapters

- Soep, L., Lee, C., Parikh, T. S., & Van Wart, S. J. 2020. Code for What? In H. Jenkins, S. Shresthova, & G. Peters-Lazaro (Eds.), Popular Culture and the Civic Imagination: A Casebook.
- Van Wart, S. J., Lanouette, K. A., & Parikh, T. S. (2016). Local Ground: Supporting Data-Driven Inquiry With Youth, Poster, *American Educational Research Association Annual Meeting* (AERA), April 8-12, 2016, Washington, DC
- Van Wart, S. J., & Parikh, T. S. (2014). Local Ground: A Toolkit Supporting Metarepresentational Competence in Data Science. In *International Conference of the Learning Sciences (ICLS)*. Boulder, CO.
- Vakil, S., Van Wart, S. J., & Parikh, T. S. (2014). Youth Citizen Design: A Social Justice Pedagogy for Teaching Design Thinking. In *Creating Balance in an Unjust World: Conference on Math Education and Social Justice*. Los Angeles, CA.
- Koy, K., Van Wart, S. J., Galey, B., O'Connor, M., & Kelly, M. (2011). Cal-Adapt: Bringing global climate change data to local application. *Photogrammetric Engineering and Remote Sensing*, 77(6), 546–550.
- Van Wart, S. J., & Manoochehri, Michael Gandomi, N. (2010). Using Paper Maps for Geospatial Data Collection. In *iConference*. Urbana-Champaign, IL.

Doctoral Dissertation

Van Wart, S. J. (2019). In search of a "fair explanation": Helping young people to consider the possibilities, limitations, and risks of computer- and data-mediated systems. Doctoral Dissertation.

PROJECTS

Local Ground 2010-

An open source participatory mapping platform that supports local geospatial data collection, analysis, and storytelling.

http://localground.org/

API Tutor

A web-based API teaching tool intended to help novices learn about REST APIs by allowing them to connect to and visualize data from various cloud services. https://www.apitutor.org

2011-2012

2015-

CalAdapt

A climate adaptation web planning tool for the State of California. Provides local decision-makers, the science community, and the public with access to climate data projections via tailored interactive maps, charts, and reports.

http://cal-adapt.org

Open Context 2008-2009

A free, open access resource for the electronic publication of primary field research from archaeology and related disciplines.

http://opencontext.org