Morgan Vigil-Hayes

Contact Information	2833 State Street, Apt. E Santa Barbara, CA 93105	209-617-5593 mvigil@cs.ucsb.edu

Teaching & Research Interests

Network analysis, wireless networks, online social networks, community networks, ICTD

Education

University of California, Santa Barbara, CA

Ph.D., Computer Science, *Expected:* Summer 2017

Thesis Topic: *Community-based Networks for Challenged Environments: Characterizing Opportunities and Designing Solutions*
Advisor: Elizabeth Belding, Ph.D.

Westmont College, Santa Barbara, CA

B.S., Computer Science, December 2011

Summa Cum Laude

Research Experience

Research Assistant   September 2012 to present
Department of Computer Science,
University of California
Supervisor: Elizabeth Belding, Ph.D.

Research Assistant   June 2013 to August 2013
Department of Computer Science,
University of Washington
Supervisor: Gaetano Borriello, Ph.D.

Peer Reviewed Publications

1. **Vigil-Hayes, M.**, Belding, E., Zegura, E. "FiDO: A Community-based CDN for Challenged Network Environments," *in submission*, 2017.

2. **Vigil-Hayes, M.**, Duarte, M., Parkhurst, N.D., Belding, E., "*#Indigenous*: Tracking the Connective Actions of Native American Advocates on Twitter," *CSCW 2017*, Portland, OR, USA. March 2017.

3. Schmitt, P., **Vigil, M.**, Belding, E., "A Study of MVNO Data Paths and Performance," *PAM 2016*, Heraklion, Crete, Greece. March 2016.

4. **Vigil, M.**, Belding, E., Rantanen, M., "Repurposing FM: Radio Nowhere to OSNs Everywhere," *CSCW 2016*, San Francisco, CA, USA. March 2016.

5. Brunette, W., **Vigil, M.**, Pervaiz, F., Levari, S., Borriello, G., Anderson, R. "Optimizing Mobile Application Communication for Challenged Network Environments," *ACM DEV 2015*, London, England, UK. December 2015.

6. Zheleva, M., Schmitt, P., **Vigil, M.**, Belding, E. "Internet Bandwidth Upgrade: Implications on Performance and Usage in Rural Zambia." *Information Technologies & International Development (ITID)*. 11:2, 1–18. Spring 2015.

7. **Vigil, M.**, Rantanen, M., Belding, E., "A First Look At Tribal Web Traffic." *WWW '15*, Florence, Italy. May 2015.

8. Zheleva, M., Schmitt, P., **Vigil, M.**, Belding, E., "The Increased Bandwidth Fallacy." *ACM DEV '13*, Cape Town, South Africa. December 2013.

9. Zheleva, M., Schmitt, P., **Vigil, M.**, Belding, E., "Bringing Visibility to Rural Users in Ivory Coast." *ICTD '13*, Cape Town, South Africa. December 2013.

10. Zheleva, M., Schmitt, P., **Vigil, M.**, Belding, E., "Community Detection in Cellular Network Traces." *ICTD '13*, Cape Town, South Africa. December 2013.

11. Schmitt, P., Zheleva, M., **Vigil, M.**, Belding, E., "Communication Flow Patterns in the Orange Telecom D4D Datase." *NetMob '13*, Boston, MA. January 2013.

AWARDS

University of California, Santa Barbara
Doctoral Scholars Fellowship, 2012–2017
NSF Graduate Research Fellowship Program Fellowship, 2013–2016
Microsoft Graduate Women's Scholarship, 2013

Westmont College
Grace Hopper Award for Top Computer Science Graduate, 2012
David K. Winter Servant Leader Award, 2011
Presidential Scholar, 2008–2011
NSF Computer Science Scholarship, 2008–2011

PRESENTATIONS

Technical Conferences
Repurposing FM, *CSCW 2016*, San Francisco, CA, USA	March 2016
First Look at Tribal Web Traffic, *WWW 2015*	May 2015
Localized Content for Village Schools, *MobiSys 2015*	May 2015
Social Media Locality in a Tribal Network, *ACM DEV 2014*	December 2014

Technical Symposia
Can Radio Kill the Coverage Gap?, *CWIC SoCal*, Ventura, CA, USA	April 2016
Localized Content for Rural Schools, *CWIC SoCal*, Carlsbad, CA, USA	April 2014

TEACHING EXPERIENCE

Instructor   Summer 2015
CMPSC 16 - Problem Solving with Computers (C++)
Department of Computer Science,
University of California, Santa Barbara

Teaching Assistant   2009–2010
CS 10 - Introduction to Programming II (Scheme)
Instructor: Wayne Iba, Ph.D.
Department of Computer Science,
Westmont College
CS 30 - Introduction to Programming III (Ruby)
Instructor: Kim Kihlstrom, Ph.D.
Department of Computer Science,
Westmont College
CS 45 - Computer Architecture and Organization
Instructor: Kim Kihlstrom, Ph.D.
Department of Computer Science,
Westmont College

SERVICE

Academic Community
INFOCOM   2014
Appointed reviewer

University
American Indians in Science and Engineering Society (AISES) September 2015 – current
Co-advisor
Met with current American Indian and Indigenous undergraduates that were pursuing STEM degrees to offer support, guidance, and mentoring.

Department

First Winter Research Colloquium for students   February 2015
Program organizer
    Planned a department-wide colloquium event to give exposure to current student research via 5 minute lightning talks. This included implementing a structured survey mechanism which enabled faculty and peers to provide feedback to speakers in real-time.

Graduate Admissions Committee   January 2015 – May 2015
Student representative
    Acted as a student representative on the graduate admissions committee, helped identify the most eligible candidates for the program, and acted as a student liason between prospective students and the department.

Women in Computer Science (WiCS)   October 2012 – May 2015
Co-president and outreach coordinator
    Coordinated monthly coffee-hours for women in the computer science department.
    Led outreach efforts to local junior high and high schools to increase interest in computing.
    Coordinated Q & A sessions between distinguished speakers and WiCS.

Graduate Student Workshop Committee (GSWC)   2013–2014
Program organizer and reviewer
    Organized the program for the annual Graduate Student Workshop, which included both paper and poster presentations for the department.
    Reviewed peer submissions to the workshop program and provided feedback.

REFERENCES

Elizabeth Belding
    Professor of Computer Science
    Department of Computer Science   E-mail: ebelding@cs.ucsb.edu
    University of California, Santa Barbara

Ellen Zegura
    Professor of Computer Science
    School of Computer Science   E-mail: ewz@cc.gatech.edu
    Georgia Institute of Technology

Wayne Iba
    Professor of Computer Science
    Department of Computer Science   E-mail: iba@westmont.edu
    Westmont College