

NICHOLAS WOODWARD

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EDUCATION

The University of Texas at Austin <i>M.S.I.S., Information Architecture</i>	08/13
The University of Texas at Austin <i>M.A., Latin American Studies</i>	08/11
The University of Nebraska-Lincoln <i>B.S., Computer Science ■ Minors in Math and Business Administration</i>	12/03

RELEVANT EXPERIENCE

University of Texas Libraries, UT Austin <i>Software Developer</i>	06/13 – Present
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- In collaboration with team members, develop a series of tools, libraries and scripts for the digitization, ingest, maintenance and export of digital collections in Fedora Commons repository software.
- Design and program online interfaces primarily with Drupal 7 and Islandora for the presentation and administration of digital collections stored in digital repository software.
- Work cooperatively with stakeholders across the university campus to develop project plans, including the requisite goals and timeline, and continuously reassess progress and future milestones.

Texas Advanced Computing Center, UT Austin <i>Graduate Research Assistant</i>	09/11 – 05/13
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- Design and build innovative online visualization tools that enable users to explore relationships across documents, authors and subjects to overcome limitations of traditional keyword searching methods in extremely large datasets.
- As a member of the Data Mining and Statistics Group, develop and implement a new approach for data input/output in the Hadoop architecture that allows for faster dynamic cluster apportionment.
- Design and conduct a series of tests for experimental network and storage hardware using real-world applications in a high performance computing environment.

LANIC, UT Austin <i>Graduate Research Assistant</i>	09/10 – 05/13
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- Design and program data mining applications to parse and index terabytes of data from Latin American web archives to create meaningful search results.
- Collaborate with team members to maintain a digital repository of more than 10,000 URLs by adding, removing and updating content to reflect the best Web resources available for research in Latin American Studies.
- Build novel approaches in social media and Web 2.0 to expand LANIC's online presence and connect users with the latest news and analysis from Latin America.

LLILAS, UT Austin <i>Research Assistant</i>	10/09 – 01/10
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- Conducted research on the image of Cuba in the media throughout the United State in the 20th century using traditional sources (books, journal and newspaper articles and microfiche) and nontraditional sources (comic books, popular literature and film and declassified documents from the LBJ Memorial Library).

COMMUNITY EXPERIENCE

El Centro de las Américas, Lincoln, Nebraska <i>Health and Technology Programs Director</i>	01/08 – 07/09
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- Taught bilingual classes for basic computer skills such as the operating system, Microsoft Office and the Internet.

- Coordinated a project with the University of Nebraska and a local elementary school to increase the literacy and computer capabilities of elementary school students.

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Peace Corps, Nicaragua

05/05 – 08/07

Small Business Volunteer

- Taught 320 secondary school students in basic economic concepts as well as the processes of starting and managing a small business.
- Taught four teachers on various pedagogical techniques to improve their teaching skills in order to make them more dynamic, creative and participatory.
- Designed and coded three dynamic websites for Peace Corps volunteers, the local mayor's office and area small businesses.

PUBLICATIONS

International Parallel and Distributed Processing Symposium, IEEE

05/12

Analysis and Optimization of Data Import with Hadoop

Hypertext, ACM

06/12

Finding and Exploring Memes in Social Media

Special Interest Group on Information Retrieval (SIGIR), ACM

08/12

On Automatically Tagging Web Documents from Examples

PRESENTATIONS

Cambio de Colores Conference

05/09

Reading, Writing and Technology: Preliminary Results from a Bilingual Reading and Computer Program in Lincoln, NE

Crisis and Opportunities in Latin America, University of California Riverside

04/10

Conditional Cash Transfer Programs in Central America: A Tale of Success and Failure

Agents of Change Conference, Tulane University

10/10

De un Día a Otro: The Effects of Constant Education Reform in Nicaraguan Classrooms

Languages of Resistance Conference, University of Texas A&M

11/10

Estamos Cumpliendo(?) The Use of Cultural Symbols in Identity Formation in Nicaraguan High Schools

Texas Conference on Digital Libraries, Texas Digital Library

05/12

Web Archives and Large-Scale Data: Preliminary Techniques for Facilitating Research

XSEDE12, Extreme Science and Engineering Discovery Environment

07/12

Towards Dynamic Provisioning and Optimization of a Hadoop Cluster: A New Approach for Data I/O in HDFS

Texas Conference on Digital Libraries, Texas Digital Library

05/13

Crowdsourcing + Machine Learning: Building an Application to Convert Scanned Documents to Text

FELLOWSHIPS AND AWARDS

Joe R. and Teresa Lozano Long Graduate Fellowship, UT Austin

2009 – 2010

Professional Development Travel Award, UT Austin

2010

Graduate Research Assistantship, LANIC

2010 – 2013

University of Texas Libraries Imagination and Innovation Grant, UT Austin

2012 – 2013

SKILLS

Software: Distributed Computing (MPI and Hadoop), Database (MySQL and PostgreSQL), Digital Repository (Fedora, DSpace, Omeka), Website (Drupal, Wordpress and MVC frameworks), Data mining and text analysis tools, OpenCV, Processing, Linux server administration

Programming Languages: Java, PHP, Javascript, XML, HTML, CSS

Languages: Fluent Spanish