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Education

- 2010-2014** UNIVERSITY OF TEXAS AT EL PASO. B.S. COMPUTER SCIENCE (MAGNA CUM LAUDE).
- 2014-** UNIVERSITY OF NOTRE DAME DU LAC. PH.D. COMPUTER SCIENCE AND ENGINEERING.
Advisor : David Chiang
▷ *Machine Translation*. ▷ *Natural Language Processing*. ▷ *High Performance Computing*. ▷ *Machine Learning*.

Experience

- Jun 2014-** NLP LAB AT THE UNIVERSITY OF NOTRE DAME. GRADUATE RESEARCH ASSISTANT.
Work with Dr. David Chiang to develop faster Machine Translation applications. Different machine learning algorithms and computer architectures (such as the Xeon Phi and NVIDIA GPUs) are used for this research.
- May 2015 - Aug 2015** ADOBE SYSTEMS. RESEARCH INTERN.
GEM Fellow intern in the Systems Technology lab mentored by Dr. Nikos Vlassis. Conducted NLP & ML research to map Natural Language to SQL using word2vec . An application in C and Python was delivered at the end of the internship
- Jan 2012 - May 2014** HIPERSYS LAB AT THE UNIVERSITY OF TEXAS AT EL PASO. UNDERGRADUATE RESEARCH ASSISTANT.
Worked with Dr. Patricia Teller to create HPC applications. Used the STAMPEDE supercomputer to analyze NVIDIA GPUs, Xeon Phis, and Sandy Bridge architectures
- Jun 2013 - Aug 2013** EXXONMOBIL CORPORATION. SOFTWARE ENGINEERING INTERN.
Program applications involving databases & the SQL reporting services. Program with C# and work with Infragistics, WPF, Winforms and Oracle databases
- May 2012 - Aug 2012** PHYSBAM LAB AT STANFORD UNIVERSITY. SUMMER INTERN.
Worked under the supervision of Dr. Ron Fedkiw and Dr. Elliot English on an Android application to simulate the interaction of rigid bodies in 3 dimensions using the PhysBAM codebase . Java and C++ were the programming languages used to code the algorithms and OpenGL ES was used for the graphics

Publications

- 2017** **Arturo Argueta**, and David Chiang. 2016. Decoding with Finite-State Transducers on GPUs. To appear in proceedings of the European Chapter of the Association of Computational Linguistics (EACL17).
- 2016** Esthela Gallardo, Patricia J. Teller, **Arturo Argueta**, and Jaime Jaloma. 2016. Cross-Accelerator Performance Profiling. In Proceedings of the XSEDE16 Conference on Diversity, Big Data, and Science at Scale (XSEDE16). ACM, New York, NY, USA, , Article 19 , 8 pages. DOI : <http://dx.doi.org/10.1145/2949550.2949567>
- 2013** Sarala Arunagiri; Jaime Jaloma; Ricardo Portillo; **Arturo Argueta**; Power and execution performance tradeoffs of GPGPU computing : a case study employing stereo matching . Proc. SPIE 8661, Image Processing : Machine Vision Applications VI, 86610W (March 6, 2013); doi :10.1117/12.2008566

Tutorials

2014 **Arturo Argueta**; Roberto Camacho Barranco; Esthela Gallardo; and Pat Teller; Quick Start Guide for Using Intel's Xeon Phi on Stampede .
<https://www.tacc.utexas.edu/documents/1084364/1157236/QSG-Main-Final-PJT.pdf/bedea045-4a1b-45ce-8a99-2269ebc1836d>

Teaching

Aug 2016 - Dec 2016 CSE 40657 : NATURAL LANGUAGE PROCESSING. TEACHING ASSISTANT.
Held office hours, and graded programming assignments & tests

Jan 2015 - May 2015 CSE 30332 : PROGRAMMING PARADIGMS. TEACHING ASSISTANT.
Held office hours and graded programming assignments

Aug 2014 - Dec 2014 CSE 30331 : DATA STRUCTURES. TEACHING ASSISTANT.
Held office hours, wrote assignments, and graded tests

Awards

2016 ACM RICHARD TAPIA CELEBRATION OF DIVERSITY IN COMPUTING 3RD PLACE POSTER AWARD FOR "HIGH SPEED NATURAL LANGUAGE PROCESSING USING GPUS".

2015 GEM FELLOW.

2013 EXXONMOBIL CORPORATION FELLOWSHIP.

Miscellaneous

LANGUAGES.
English, Spanish, German, and French