

Vicente Ordóñez-Román

CONTACT INFORMATION	85 Engineer's Way Rice Hall 310, PO Box 400740 Charlottesville, VA 22904	vicente@virginia.edu Phone: (631) 413 7794 http://www.cs.virginia.edu/~vicente
RESEARCH INTERESTS	I am interested in analyzing large scale media collections using Computer Vision and Natural Language Processing using techniques from Machine Learning and Deep Learning. I am also interested in exploring applications in Social Media, Urban Computing, and Digital Media.	
CURRENT POSITION	Assistant Professor University of Virginia (UVA) , Charlottesville, Virginia. Department of Computer Science, School of Engineering and Applied Science. I am starting a new UVA Computer Vision group.	2016 - present
PREVIOUS POSITION	Visiting Research Fellow Allen Institute for Artificial Intelligence (AI2) , Seattle, Washington. I worked at the intersection of Vision and Language in the Computer Vision group led by Prof. Ali Farhadi from the University of Washington (UW).	2015 - 2016
EDUCATION	The University of North Carolina at Chapel Hill (UNC) Doctor of Philosophy in Computer Science Thesis: Language and Perceptual Categorization in Computational Visual Recognition Committee: Tamara L. Berg (advisor), Alexander C. Berg, Jan-Michael Frahm, Yejin Choi (University of Washington), Alexei A. Efros (UC Berkeley)	2013 - 2015
	Stony Brook University, The State University of New York (SUNY) Master of Science in Computer Science	2009 - 2013
	Escuela Superior Politécnica del Litoral (ESPOL) , Ecuador. Computer Engineering Degree (GPA: 9.22/10.0)	2003 - 2008
SELECTED AWARDS	Research Highlight of the Communications of the ACM, March 2016 Issue. Allen Institute for Artificial Intelligence Hackathon 2015 – <i>Peer Favorite Award</i> IEEE Marr Prize in Computer Vision 2013 – <i>ICCV Best Paper Award</i> . Yahoo! Key Scientific Challenges Award, 2012. Renaissance Technologies Fellowship, 2009 - 2011. Philanthropic Society Medal, Guayaquil, Ecuador, 2007. Top GPA in the Computer Engineering Program, ESPOL, 2004 - 2007.	
INDUSTRY EXPERIENCE	Microsoft Research , Cambridge, Massachusetts. <i>Research Intern in the Computer Vision Group</i> Large scale data-driven scene parsing using deep learning features. I was fortunate to work with Ce Liu and Michael Rubinstein.	Summer 2014
	eBay Research Labs , San Jose, California. <i>Research Intern in the Computer Vision Group</i> Worked on attribute predictions on catalog image and text collections in the Mantis Computer Vision group. I was fortunate to work with Robinson Piramuthu and Vignesh Jagadeesh.	Summer 2013

Google, Mountain View, California. Summer 2011
Software Engineering Intern in the Android Multimedia Content Analysis Group
Automatic organization of personal image collections using visual features.
This work later evolved into the Google+ Beautiful Movies made Auto Awesomely.
I was fortunate enough to be mentored by Rodrigo Carceroni and Wei Hua.

Google, Mountain View, California. Spring 2008, Summer 2008
Software Engineering Intern in Google Earth
Developed code for automated quality analysis of satellite images
at the imagery database group for Google Earth and Google Maps.
My mentor was Rodrigo Carceroni.

ACADEMIC EXPERIENCE

The University of North Carolina at Chapel Hill 2013 - 2015
Research Assistant at the Computer Science Department
Performed research in visual language grounding and extracting visual meaning
from large scale noisy collections of text and images in the research group
of Prof. Tamara L. Berg, and also worked with Prof. Alexander C. Berg.

Stony Brook University (SUNY), Stony Brook, New York. 2010 - 2013
Research Assistant at the Vision and Digital Media Lab
Large scale analysis of text and images, large scale image classification,
language generation and eye gaze data analysis. I was part of the research group
of Prof. Tamara L. Berg and also collaborated with Prof. Yejin Choi.

Center for Information Technologies (ESPOL), Guayaquil, Ecuador. 2006 - 2009
Research Assistant at the Technology Enhanced Learning Group
Worked on e-learning and document retrieval under Prof. Xavier Ochoa
and also collaborated briefly with Prof. Erik Duval (KU Leuven)

PUBLICATIONS

Commonly Uncommon: Semantic Sparsity in Situation Recognition.
Mark Yatskar, Vicente Ordonez, Luke Zettlemoyer, Ali Farhadi.
Int. Conf. on Computer Vision and Pattern Recognition. [CVPR 2017](#). Honolulu, Hawaii.

XNOR-Net: ImageNet Classification Using Binary Convolutional Neural Networks.
Mohammad Rastegari, Vicente Ordonez, Joseph Redmon, Ali Farhadi.
European Conference on Computer Vision. [ECCV 2016](#). Amsterdam, Netherlands.
(Oral presentation)

Stating the Obvious: Extracting Visual Common Sense Knowledge.
Mark Yatskar, Vicente Ordonez, Ali Farhadi. North American Chapter of the Association
of Computational Linguistics. [NAACL 2016](#). short. San Diego, CA
(Oral presentation)

Learning to Name Objects.
Vicente Ordonez, Wei Liu, Jia Deng, Yejin Choi, Alexander C. Berg, Tamara L. Berg.
Communications of the ACM. March 2016. Vol 59, No. 3. [CACM 2016](#).
(Research Highlight, Invited Paper)

Large Scale Retrieval and Generation of Image Descriptions.

V. Ordonez, X. Han, P. Kuznetsova, G. Kulkarni, M. Mitchell, K. Yamaguchi, K. Stratos, A. Goyal, J. Dodge, A. Mensch, H. Daume III, A.C. Berg, Y. Choi, T.L. Berg.

International Journal of Computer Vision. Special Issue on Big Data. [IJCV 2016](#).

(Journal Paper)

Predicting Entry-Level Categories.

Vicente Ordonez, Wei Liu, Jia Deng, Yejin Choi, Alexander C. Berg, Tamara L. Berg.

International Journal of Computer Vision - Marr Prize Special Issue. [IJCV 2015](#).

(Journal Paper)

ReferitGame: Referring to Objects in Photographs of Natural Scenes.

Sahar Kazemzadeh, Vicente Ordonez, Mark Matten, Tamara L. Berg

Empirical Methods on Natural Language Processing. [EMNLP 2014](#). Doha, Qatar.

(Oral presentation)

Learning High-level Judgments of Urban Perception.

Vicente Ordonez, Tamara L. Berg

European Conference on Computer Vision. [ECCV 2014](#). Zurich, Switzerland.

TreeTalk: Composition and Compression of Trees for Image Descriptions.

Polina Kuznetsova, Vicente Ordonez, Tamara L. Berg, Yejin Choi.

Transactions of the Association of Computational Linguistics. [TAACL 2014](#)

Presented at EMNLP 2014. Doha, Qatar.

(Oral Presentation, Journal Paper)

FurnitureGeek: Understanding Fine-Grained Furniture Attributes from Freely Associated

Text and Tags. Vicente Ordonez, Vignesh Jagadeesh, Wei Di, Anurag Bhardwaj, Robinson Piramuthu. IEEE Winter Conference on Applications of Computer Vision. [WACV 2014](#).

Steamboat Springs, CO

From Large Scale Image Categorization to Entry Level Categories.

Vicente Ordonez, Jia Deng, Yejin Choi, Alexander C. Berg, Tamara L. Berg.

IEEE International Conference on Computer Vision. [ICCV 2013](#). Sidney, Australia.

(Oral presentation) **(Best Paper Award - Marr Prize)**

(Selected for publication in the Research Highlights of the Communications of the ACM Magazine)

Generalizing Image Captions for Image-Text Parallel Corpus.

Polina Kuznetsova, Vicente Ordonez, Alexander C. Berg, Tamara L. Berg, Yejin Choi.

Association for Computational Linguistics. [ACL 2013](#). short. Sofia, Bulgaria.

Babytalk: Understanding and Generating Image Descriptions.

G. Kulkarni, V. Premraj, V. Ordonez, S. Dhar, S. Li, Y. Choi, A. C. Berg, T. L. Berg.

IEEE Transactions on Pattern Analysis and Machine Intelligence. [TPAMI 2013](#).

(Journal paper)

Collective Generation of Natural Image Descriptions.

Polina Kuznetsova, Vicente Ordonez, Alexander C. Berg, Tamara L. Berg, Yejin Choi.

Association for Computational Linguistics. [ACL 2012](#). Jeju, South Korea.

(Oral presentation)

Im2Text: Describing Images Using 1 Million Captioned Photographs.
Vicente Ordonez, Girish Kulkarni, Tamara L. Berg.
Neural Information Processing Systems. NIPS 2011. Granada, Spain.
(Spotlight presentation)

High Level Describable Attributes for Predicting Aesthetics and Interestingness.
Sagnik Dhar, Vicente Ordonez, Tamara L. Berg.
IEEE Computer Vision and Pattern Recognition. CVPR 2011. Colorado Springs, CO.

The Ariadne Infrastructure for Managing and Storing Metadata.
S. Ternier, G. Parra, B. Vandeputte, K. Verbert, J. Klerkx, E. Duval, V. Ordonez, X. Ochoa.
Emerging Internet Technologies and Applications for E-learning.
IEEE Internet Computing 2009.
(Journal paper)

PATENTS

Techniques for automatic photo album generation. Google Inc.
Vicente Ordonez, Wei Hua, Rodrigo L. Carceroni, Jennifer Gillenwater, Amarnag Subramanya. US Patent No. 8983193. (2015).

Correlating image annotations with foreground features. eBay Inc.
Anurag Bhardwaj, Robinson Piramuthu, Vicente Ordonez, Vignesh Jagadeesh, Wei Di.
US Patent No. 20150067471. (2015).

MEDIA COVERAGE / PRESS RELEASES

Beyond Silicon: Squeezing More Out of Chips. The New York Times. 10/30/2016.
<http://www.nytimes.com/2016/10/31/technology/beyond-silicon-squeezing-more-out-of-chips.html>

Artificial Intelligence at Your Fingertips. University of Washington CSE News. 10/30/2016.
<https://news.cs.washington.edu/2016/10/31/uw-cse-and-ai2-in-the-new-york-times-artificial-intelligence-at-your-fingertips/>

A Powerful Legacy and a Bright Future in the Digital Humanities. UVA Today. 10/13/2016.
<https://www.news.virginia.edu/content/powerful-legacy-and-bright-future-digital-humanities>

INVITED TALKS

Vision, Language and Perception. October 2016
Digital Humanities Conference at the University of Virginia – DH@UVA

Language and Perceptual Categorization in Computer Vision. April 2015
Toyota Technological Institute at Chicago TTI-C
Hosted by Prof. Greg Shakhnarovich.

Allen Institute for Artificial Intelligence AI2, Seattle, Washington March 2015
Hosted by Prof. Ali Farhadi.

California Institute of Technology (Caltech), Pasadena, California March 2015
Hosted by Prof. Pietro Perona.

Carnegie Mellon University, The Robotics Institute VASC Seminar Series February 2015
Hosted by Prof. Abhinav Gupta.

Disney Research Pittsburgh, The Walt Disney Company. January 2015
Hosted by Senior Research Scientist Leonid Sigal.

Stanford University, Department of Computer Science, Vision Group. December 2014
Hosted by Prof. Fei-fei Li.

Integrating Vision and Language.
University of Virginia, Computer Science Dept. Charlottesville, Virginia March 2015
Virginia Tech, Computer Science Dept., Blacksburg, Virginia March 2015
Drexel University, Computer Science Dept. Philadelphia, Pennsylvania February 2015

Learning High-level Judgments of Urban Perception. September 2014
ECCV 2014 Workshop on Storytelling with Images and Videos. ETH Zurich
ECCV 2014 Workshop on Human-Machine Communication for Visual Recognition. ETH Zurich

Understanding Image Descriptions in the Wild. July 2013
Yahoo! Labs, Sunnyvale, California.
Hosted by Research Scientist Amit Goyal.

Data-driven Generation of Image Descriptions. June 2013
North American Chapter of the Association for Computational Linguistics (NAACL)
Workshop on Vision and Language (WVL) 2013. Atlanta, GA

TEACHING EXPERIENCE

Instructor.

CS6501 – 004: Vision and Language. University of Virginia Spring 2017
Course website: <http://www.cs.virginia.edu/~vicente/vislang>
Advanced Graduate Class: 32 students
7 CS PhD, 9 CS MS, 3 SysEng MS, 11 Data Science MS, 2 CS BSc

CS6501 – 003: Computational Visual Recognition. University of Virginia. Fall 2016
Course website: <http://www.cs.virginia.edu/~vicente/recognition>
Advanced Graduate Class: 36 students
6 PhD (4 CS + 1 BioMed + 1 Stats), 16 CS MS, 4 MEng, 4 Data Science MS, 6 CS BSc

Teaching Assistant.

Foundations of Computer Science. Stony Brook University. 2009-2010
Object Oriented Programming. Escuela Superior Politécnica del Litoral, Ecuador. 2005
Introduction to Programming. Escuela Superior Politécnica del Litoral, Ecuador. 2004
Physics for Engineering. Escuela Superior Politécnica del Litoral, Ecuador. 2004

Guest Lectures.

Introduction to Computer Vision. University of Virginia February 2017
Language and Vision. University of North Carolina at Chapel Hill. February 2015
Computer Vision. University of North Carolina at Chapel Hill. November 2014
Artificial Intelligence. University of North Carolina at Chapel Hill. January 2014
Advanced Multimedia. Stony Brook University. April 2013
Computational Photography. Stony Brook University. March 2013

OTHER ACTIVITIES

Lead Organizing Committee.

CVPR Workshop on Large Scale Visual Recognition and Retrieval *BigVision* 2016
Stony Brook University Computer Science Graduate Research Conference 2010

Program Committee.

NIPS Workshop on Efficient Methods for Deep Neural Networks 2016
ECCV Workshop on Web-scale Vision and Social Media 2016
ICCV Workshop on Closing the Loop Between Vision and Language 2015
ICCV Workshop on Web-scale Vision and Social Media 2015

EMNLP Workshop on Vision and Language 2015
ECCV Workshop on Storytelling with Images and Videos - *VisStory* 2014
ECCV Workshop on Human-Machine Communication for Visual Recognition 2014
Reviewer.
Int'l Conf. Computer Vision and Pattern Recognition (CVPR) 2015, 2016, 2017
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2014 - 2017
Association for Computational Linguistics (ACL) 2014, 2016, 2017
International Conference on Computer Vision (ICCV) 2015, 2017
Empirical Methods in Natural Language Processing (EMNLP) 2015, 2017
International Joint Conference in Artificial Intelligence (IJCAI) 2016
International Journal of Computer Vision (IJCV) 2014 - 2016
Neural Information Processing Systems (NIPS) 2016
European Conference on Computer Vision (ECCV) 2016
Asian Conference on Computer Vision (ACCV) 2016
Int'l Conference on Computer Graphics and Interactive Techniques (SIGGRAPH) 2016
North American Chapter of the Association for Computational Linguistics (NAACL) 2016
IEEE Transactions on Multimedia (TM) 2013, 2016.
Elsevier Computer Vision and Image Understanding (CVIU) 2014, 2015
Elsevier Information Processing Letters (IPL) 2014
IEEE Transactions on Neural Networks and Learning Systems (TNNLS) 2014
IEEE Transactions on Image Processing (TIP) 2013.
ACM Multimedia (MM) 2010. International Multimedia Conference.