

# Nikhil Rasiwasia

Doctoral Candidate

Electrical and Computer Engineering  
University of California San Diego  
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## — EDUCATION —

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- 2005 – present **University of California San Diego** La Jolla, CA  
Ph.D. in Electrical and Computer Engineering  
Research Area Computer Vision, Machine Learning  
Dissertation Semantic Representation for Visual Recognition  
Adviser Nuno Vasconcelos  
GPA 3.97
- 2001 – 2005 **Indian Institute of Technology Kanpur** Kanpur, India  
Bachelor of Technology in Electrical Engineering  
Thesis 3-D Face Reconstruction  
Adviser K. S. Venkatesh  
GPA 9.0/10.0

## — RESEARCH EXPERIENCE —

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- 2005 – present **University of California San Diego** La Jolla, CA  
*Graduate Student Researcher*  
Department of Electrical and Computer Engineering
- July – Sept'09 **Microsoft Research** Mountain View, CA  
*Research Intern*  
Search Labs
- July – Sept'07 **Google Inc.** Mountain View, CA  
*Software Engineering Intern*  
Image Search Group
- May – Aug'05 **University of California San Diego** La Jolla, CA  
*Freelance Researcher*  
Department of Visual Arts
- May – July'04 **Fondazione GraphiTech** Trento, Italy  
*Research Intern*  
Center for Advanced Computer Graphics

## — TEACHING EXPERIENCE —

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- Fall 2006 **Teaching Assistant**  
University of California San Diego  
*ECE 271A - Statistical Learning I (Graduate)*
- Summer 2005 **Lecturer**  
Indian Institute of Technology Kanpur  
*Summer School - Image Processing (Undergraduate)*

## — HONORS —

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- 2010 Best student paper award in ACM Multimedia  
2009 UCSD nominee for Google Fellowship  
2008 Recognised by IBM T. J. Watson Research as an ‘Emerging Leader in Multimedia’  
2005 Full tuition scholarship and Research Assistantship at UCSD  
2005 Nominated for “Best undergraduate student for all-around performance”, IITK  
2002, 2005 Certificate of Merit for Academic Excellence in Undergraduate Program, IITK  
2001 All India Rank - 302 (top 0.2%) in IIT-JEE, 129 in Roorkee Entrance Exam

## — PUBLICATIONS —

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### JOURNALS

- [1] **N. Rasiwasia** and N. Vasconcelos, ‘*Bridging the Semantic Gap: Query by Semantic Example*’, IEEE Transactions on Multimedia, 9(5), 923-938, August 2007.
- [2] **N. Rasiwasia** and N. Vasconcelos, ‘*Holistic Context Models for Visual Recognition*’, Submitted to IEEE Transactions on Pattern Analysis and Machine Intelligence.

### CONFERENCES

- [3] **N. Rasiwasia**, J. Costa Pereira, E. Coviello, G. Doyle, G.R.G. Lanckriet, R. Levy and N. Vasconcelos, ‘*A New Approach to Cross-Modal Multimedia Retrieval*’, ACM Conference on Multimedia, 251-260, November 2010 [**Oral**] [**Best student paper**]
- [4] **N. Rasiwasia** and N. Vasconcelos, ‘*Holistic Context Modelling using Semantic Co-occurrences*’, IEEE Conference on Computer Vision and Pattern Recognition, Miami, June 2009
- [5] **N. Rasiwasia** and N. Vasconcelos, ‘*Image Retrieval using Query by Contextual Example*’, ACM Conference on Multimedia Information Retrieval, pp. 164-171, Vancouver, Oct 2008
- [6] **N. Rasiwasia** and N. Vasconcelos, ‘*A Systematic Study of the role of Context on Image Classification*’, IEEE Conference on Image Processing, 1720-1723, San Diego, Oct 2008 [**Oral**]

- [7] **N. Rasiwasia** and N. Vasconcelos, ‘*Scene Classification with Low-dimensional Semantic Spaces and Weak Supervision*’, IEEE Conference on Computer Vision and Pattern Recognition, pp. 1-6, Anchorage, June 2008
- [8] **N. Rasiwasia** and N. Vasconcelos, ‘*A study of Query by Semantic Example*’, 3rd International Workshop on Semantic Learning and Applications in Multimedia, pp. 1-8, Anchorage, June 2008 [**Oral**]
- [9] **N. Rasiwasia**, P. J. Moreno and N. Vasconcelos, ‘*Query by Semantic Example*’, ACM International Conference on Image and Video Retrieval, LNCSPHOENIX, 2006 [**Oral**]

#### BACHELOR THESIS

- [10] **N. Rasiwasia** and K. S. Venkatesh, ‘*The Avatar: 3D Face Reconstruction from two orthogonal pictures with application to facial makeover*’, Technical Report, Indian Institute of Technology Kanpur, May 2005

### — SELECTED TALKS —

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#### Cross-Modal Multimedia Retrieval

Nov 2010 Yahoo Labs India, Bangalore, India

#### Context Models for Visual Recognition

Nov 2010 Microsoft Research India, Bangalore, India

September 2009 Google Inc., Mountain View, CA

August 2009 FX Palo Alto Laboratory, Inc., Palo Alto, CA

July 2009 Microsoft Research Silicon Valley, Mountain View, CA

#### Hierarchical Semantic Representation for Image Retrieval

Oct 2008 Southern California Computer Vision Meetup, UC Irvine, CA

Oct 2008 Emerging Leaders in Multimedia, IBM T. J. Watson Research Center, NY, USA

#### Computer Vision and Photography

Nov 2010 Photography Club, DreamWorks (Technicolor), Bangalore, India

### — REVIEWING —

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IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)

IEEE Transactions on Multimedia

IEEE Transactions on Image Processing

Image and Vision Computing Journal

ACM Multimedia 2010

### — REFERENCES —

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Available on request