

FEI-FEI LI
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EDUCATION

California Institute of Technology, Electrical Engineering Dept., **Ph.D.**, 2001-2005
(Advisors: Prof. Pietro Perona (primary), Prof. Christof Koch (secondary))
California Institute of Technology, Electrical Engineering Dept., **M.S.**, 2000-2001
(Advisors: Prof. Pietro Perona (primary), Prof. Christof Koch (secondary))
Princeton University, Physics Dept. **B.A.**, 1995-1999

PROFESSIONAL EXPERIENCE

Assistant Professor, Computer Science Dept., Stanford University, Stanford, CA
(2009.06 – present)
Assistant Professor, Computer Science Dept., Princeton University, Princeton, NJ
(2007.01 – 2009.06)
Associated Assistant Professor, Psychology Dept., Princeton University, Princeton,
NJ (2007.01 – 2009.06)
Associated Assistant Professor, Electrical Engineering Dept., Princeton University,
Princeton, NJ (2007.01 – 2009.06)
Assistant Professor, Electrical and Computer Dept., University of Illinois at Urbana-
Champaign, Urbana, IL (2005.08 – 2006.12)
Associated Assistant Professor, Psychology Dept., University of Illinois at Urbana-
Champaign, Urbana, IL (2005.08 – 2006.12)
Visiting Research Scientist, Microsoft Research Center Cambridge, Cambridge, UK
(2005.03 – 2005.06; 2004.05 – 2004.07)

ACADEMIC HONORS, AWARDS AND SCHOLARSHIPS

1st Place in the PASCAL VOC Action Classification Challenge. An internationally
recognized premier computer vision competition. 2011
Alfred P. Sloan Fellowship. A highly prestigious fellowship awarded to the “best
scholars in [the current] generation.” 2011
Best Paper Honorable Mention. IEEE Conference on Computer Vision and Pattern
Recognition (CVPR). 2010
Stanford Terman Fellowship. 2009.09
NSF CAREER Award. 2009.07
Google Research Award. 2010.03; 2008.06
1st Place in the Semantic Robot Vision Challenge Software League. An NSF and
AAAI sponsored visual recognition competition. 2007.
Microsoft Research New Faculty Fellowship. A highly selective fellowship awarded to
“the best new professors in computing disciplines today.” 2006.
IEEE ICCV Best Short Course Prize (w. R. Fergus and A. Torralba). 2005

National Science Foundation Postgraduate Fellowship. 1999-2002
Paul and Daisy Soros Fellowship for New Americans. 1999-2002
Princeton University Martin Dale '53 Fellowship. 1999-2000
Princeton University Kusaka Memorial Prize in Physics. 1999

PROFESSIONAL ACTIVITIES

Organizing Committee

- Local arrangement chair, IEEE Conference of Computer Vision and Pattern Recognition (CVPR), 2010
- Industrial Liaison, IEEE Conference of Computer Vision and Pattern Recognition (CVPR), 2012

Area Chair

- Neural Information Processing Systems (NIPS), 2010, 2011
- IEEE International Conference of Computer Vision (ICCV), 2007, 2011
- IEEE Conference of Computer Vision and Pattern Recognition (CVPR), 2009, 2010, 2012
- European Conference of Computer Vision (ECCV), 2012

Program Committee Member (Selected list)

- IEEE International Conference on Computer Vision (ICCV), 2005, 2009
- European Conference on Computer Vision (ECCV), 2004, 2006, 2008
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2004, 2006, 2007, 2008
- Neural Information Processing Systems (NIPS), 2008
- Computational and Systems Neuroscience (COSYNE), 2011
- International Conference on Energy Minimization Methods in Computer Vision and Pattern Recognition (EMMCVPR), 2007
- IEEE International Conference on Pattern Recognition (ICPR), 2006

Workshop, Tutorial and Course Organizer or Chair-person

- Co-Organizer, ImageNet Large Scale Visual Recognition Challenge, 2010, 2011
- Co-Chair, Mechanical Turk for Computer Vision (CVPR), 2010
- Organizer, Bay Area Vision Meeting (BAVM), 2009
- Co-director, 1st Sino-USA Summer School in Vision, Learning and Pattern Recognition (VLPR), 2009
- Co-Chair, 1st International Workshop in Visual Scene Understanding (ViSU), IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2009
- Co-Chair, International Workshop in 3D Representation for Recognition, IEEE Conference on Computer Vision (ICCV), 2007
- Co-Organizer, Tutorial on Recognizing and Learning Object Categories, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2007
- Co-Chair, Vision Sciences Society (VSS) Annual Meeting Satellite Symposium: Natural Scene Understanding: Statistics, Recognition and Representation, 2007
- Co-Chair, International Workshop in Computer Vision (in collaboration with Microsoft MSRA), Tibet, 2006
- Co-Organizer, Tutorial on Recognizing and Learning Object Categories, IEEE International Conference on Computer Vision (ICCV), 2005

Journal Reviewer or Editorial Board

- Computer Vision: International Journal of Computer Vision (IJCV), IEEE Transaction in Pattern Analysis and Machine Intelligence (PAMI), Computer

- Vision and Image Understanding (CVIU), ACM Transaction on Applied Perception (TAP)
- Machine Learning: Journal of Machine Learning Research (JMLR)
- Human Vision: Cognitive Psychology, Journal of Vision (JOV), NeuroImage, Journal of Experimental Psychology (JEP), ACM Transaction on Applied Perception (TAP)

Reviewer or Review Committee, Funding Agencies

- NSF, CAREER, proposal panelist, 2006
- NSF, Cognitive Neuroscience, panelist, reviewer, 2008, 2009
- NSF, Perception, Action and Cognition, reviewer, 2008
- NSF, Robotic Intelligence, panelist, reviewer, 2009

SEMINARS AND INVITED TALKS

Tutorials and Courses

- *2nd Plus Advanced School on Computer Vision, Pattern Recognition and Image Processing*. Italian Institute of Technology. 2011.03
- *DragonStar Machine Learning Lectures*. China. 2010.08
- *High-level Visual Recognition: Understanding the Visual World beyond Isolated Objects*. 6th Image Processing and Computer Vision School, Center for Mathematical Investigations (CIMAT), Mexico, 2009.08
- *Object Recognition: an Introduction and a Few Case Studies*. Keynote Speech. International Computer Vision Summer School, Sicily, Italy, 2007.07
- *Computer Vision : Discovering Meaning in the Visual World*. Lecturer, IPAM, UCLA, 2007.07
- *Recognizing and Learning Object Categories: Year 2007*. Short course tutorial, International Conference on Computer Vision. 2007.06
- *Generative Models for Visual Objects and Object Recognition via Bayesian Inference*. Carnegie Mellon University Machine Learning Autumn School, 2006.09

Keynote Speeches, Invited Talks and Seminars

- *Modeling mutual context of object and human pose in human-object interaction activities*, International Conference on Machine Learning (ICML), invited cross-conference talk speaker, 2011.06
- *Object Bank: a high-level image representation for complex scene understanding*. Workshop on Learning Architectures, Representations and Optimization for Speech and Visual Information Processing at ICML, invited speaker, 2011.06
- *Large-scale image classification: ImageNet and ObjectBank*, Microsoft Bing Tech Talk, invited speaker, 2011.06
- *Recognizing human-object interaction activities*. Workshop on Activity Recognition Challenges at CVPR, keynote speaker, 2011.06
- *Building the forest: large scale data and modeling in computer vision*, Workshop on Large Scale Learning for Vision at CVPR, invited speaker, 2011.06
- *Combining randomization and discrimination for fine-grained image categorization*, 1st workshop on fine-grained visual categorization at CVPR, invited speaker, 2011.06
- *High-Level Visual Recognition*, Information Science and Technology Seminar Series at California Institute of Technology, invited speaker, 2011.04
- *Large-scale image classification: ImageNet and ObjectBank*, Google Tech Talk, invited speaker, 2011.03

- *Visual Recognition: Handling hidden structure, high dimensionality and large-scale data*. Microsoft Research, invited talk, 2010.12
- *Visual Recognition: Handling hidden structure, high dimensionality and large-scale data*. Princeton University, invited talk, 2010.12
- *Visual Recognition: ML methods for handling hidden structure, high dimensionality and large-scale data*. Workshop on Machine Learning for Next Generation Computer Vision Challenges at NIPS, invited speaker, 2010.12.
- *Visual Recognition Beyond Simple Actions and Isolated Actors and Objects*. 2nd Workshop on Use of Context in Video Processing (UCVP) at CVPR, keynote speaker, 2010.06
- *Building ImageNet: Keeping Humans in the Loop*. Workshop on Advancing Computer Vision with Humans in the Loop (ACVHL) at CVPR, keynote speaker, 2010.06
- *What, where and whom: What do humans see in a glance of a scene? And what can computers see?* NSF Workshop on Hybrid Neuro-Computer Vision System, Columbia University, 2010.04
- *Telling Stories in Images: Modeling Hierarchies In and Across Images*. Intelligence Seminar, Carnegie Mellon University, invited talk, 2010.03
- *ImageNet: Crowdsourcing, Benchmarking and Other Cool Things*. Vision Seminar, Carnegie Mellon University, invited talk, 2010.03
- *Towards Total Scene Understanding: Data-Driven Learning Meetings Detailed Learning*. National Taiwan University & National Chiao Tung University, invited talk, 2010.01
- *From Bag-of-Words to Total Scene Understanding: Evolution of Topic Models in Visual Recognition*. NIPS workshop on Applications for Topic Models: Text and Beyond, invited talk, 2009.12
- *ImageNet: A Multi-Million Image Ontology via Crowd-Sourcing from the Internet*. 2nd IEEE Workshop on Internet Vision (CVPR), invited talk, 2009.06
- *Learning High-Level Concepts from Noisy Internet Images*. 4th IEEE Workshop on Semantic Learning and Applications in Multimedia – SLAM09 (CVPR), invited talk, 2009.06
- *Natural Scene Categorization: Behaviors, Brains and Computers*. 1st IEEE Workshop on Visual Place Categorization – VPC (CVPR), invited talk, 2009.06
- *Understanding the Visual World: A Case for Generative Models*. 3rd Annual Workshop for Women in Machine Learning (NIPS), keynote, 2008.12
- *Understanding Human Motion*. New York University, 2008.12
- *Telling the Story of an Image*. Google Research Center, China. 2008.07
- *Telling the Story of an Image*. Chinese Academy of Science, 2008.07
- *Telling the Story of a Scene: from Humans to Computers*. Rutgers University, 2nd Annual Perceptual Science Forum, keynote, 2008.05
- *Telling the Story of a Scene: from Humans to Computers*. University of Maryland, 2008.03
- *Telling the Story of an Image*. ONR MURI workshop, Caltech, 2007.12
- *Discovering Meaning in the Visual World*. Microsoft Research Center Asia (MSRA), Beijing, 2007.08
- *Discovering Meaning in the Visual World*. Google, NYC, 2007.06
- *Discovering Meaning in the Visual World*. MIT Machine Vision Colloquium. 2007.05
- *Modeling real-world objects: a statistical approach*. COSYNE 2007 Workshop “How can we understand shape coding in higher level visual areas?”, 2007.02

- *Nature Scene Classification Using Distributed fMRI Activity*. Scene Understanding Symposium, MIT, 2007.02
- *Unsupervised Learning of Human Action Categories Using Spatial-Temporal Words*. Carnegie Mellon University Machine Learning CALD Seminar Series, 2006.09
- *Object and Scene Recognition*. School of Information Engineering, Beijing University of Post and Telecommunication, 2006.08
- *Nature Scene Classification Using Distributed fMRI Activity*. Scene Understanding Symposium, MIT, 2007.02
- *Natural Scene Categorization: From Humans to Computers*. Scene Understanding Symposium, MIT. 2006.02
- *A Bayesian Framework for Natural Scene Categorization*. Graphics Lunch Seminar Series, Princeton University, 2005.12
- *A Hierarchical Bayesian Model for Learning Natural Scene Categories*. Sarnoff Corporation and Siemens Corporation, 2005.12
- *Natural Scene Categorization: from Humans to Computers*. Coordinated Sciences Laboratory Seminars, UIUC, 2005.09
- *Natural Scene Categorization in Humans and Computers*. AIVRH Seminar Series, UIUC, 2006.01
- *A Hierarchical Bayesian Model for Learning Natural Scene Categories*. Oxford University Visual Geometry Group Seminar, Oxford University, 2005.04
- *A Bayesian Framework for Unsupervised One-Shot Learning of Object Categories*. SHAPE Seminar Series, Brown University, 2004.02
- *One-Shot Learning of Object Categories*. Electrical Engineering Dept., Princeton University, 2004.02
- *One-Shot Learning of Object Categories*. Computer Science Dept., New York University, 2003.12
- *A Bayesian Framework for Unsupervised One-Shot Learning of Object Categories*. Louvain University, Belgium, 2003.10
- *Natural Scene Categorization Without Attention*. Katholieke Universiteit Leuven, Belgium, 2003.10
- *Natural Scene Categorization With little Attention*. Statistics Dept., University of California Los Angeles, 2003.05
- *Natural Scene Categorization Without Attention*. Brain and Cognitive Sciences Dept., MIT, 2003.02
- *Natural Scene Categorization Without Attention*. Plymouth University, UK, 2003.01
- *Natural Scene Categorization Without Attention*. CNRS Toulouse, France, 2002.12
- *Natural Scene Categorization Without Attention*. Psychology Dept., Princeton University, 2002.10

ADVISING

Postdocs

- Dirk B. Walthers, PhD from Caltech, (Beckman Institute, UIUC, 2006 – 2010), currently Assistant Professor at Ohio State University
- Michelle Greene, PhD from MIT, (2011.06 – present)

Graduate Students

- Juan Carlos Niebles (Ph.D. 2005.09 – 2010.12, EE, Princeton), currently Assistant Professor at Universidad del Norte, Colombia

- Jia Li (Ph.D. 2006.09 – 2011.09, CS, Stanford), Research Scientist at Yahoo! Research
- Eamon Caddigan (Ph.D. 2006 – present, Psych, UIUC, co-advised by Prof. Diane Beck)
- Jia Deng (Ph.D 2007.09 – present, CS, Princeton, co-advised by Prof. Kai Li)
- Bangpeng Yao (Ph.D. 2008.09 – present, CS, Stanford)
- Chris Baldassano (Ph.D. 2009.09 – present, CS, Stanford)
- Catalin Marius Iordn (Ph.D. 2009.09 – present, CS, Stanford)
- Olga Russakovsky (Ph.D. 2008.09 – present, CS, Stanford)
- Hao Su (Ph.D. 2010.09 – present, CS, Stanford)
- Kevin Tang (Ph.D. 2010.09 – present, CS, Stanford)

Master Students

- Vinayak Agarwal (2010 – 2011, CS, Stanford)
- Rob Cosgriff (2010 – 2011, EE, Stanford), currently employee at VideoSurf, Inc
- Georgios Georgiadis (2009 – 2010, CS, Stanford), currently Ph.D. candidate at UCLA
- Dan Goodwin (2010 – 2011, EE, Stanford), currently employee at IDEO
- Aditya Khosla (2010 – 2011, CS, Stanford), currently Ph.D. candidate at MIT
- Yongwhan Lim (2011 – present, CS, Stanford)
- Yu Lou (2009 – present, CS, Stanford)
- Sanjeev Satheesh (2010 – present, CS, Stanford)
- Jiahui Shi (2011 – present, CS, Stanford)
- Ningxuan Wang (2010 – present, CS, Stanford)
- Haizi Yu (2010 – present, Stat, Stanford)

Undergraduate Students

- Yongwhan Lim (2009-2011, CS, Stanford)
- Brendan Collins (A.B., 2007 – 2008, CS, Princeton)
- Minh Do (B.E., 2009, EE, Princeton)
- Paul Kompfer (A.B., 2007 - 2008, CS, Princeton)
- Douglas Horhensee (B.E., 2007 – 2008, CS, Princeton)
- Brian Leo Quanz (B.E., 2006 – 2007, ECE, UIUC)
- Justas Birgiolos (B.E., 2006 – 2007, ECE and Psych, UIUC)

TEACHING EXPERIENCES

- Instructor, Computer Vision (CS231a), Stanford University, Fall 2011
- Instructor, Computer Vision (CS223c), Stanford University, Spring 2011
- Instructor, Computer Vision (CS223b), Stanford University, Winter 2010, 2011
- Instructor, High-Level Scene Understanding (CS423b/PSY250), Stanford University, Spring 2010
- Instructor, Advanced Reading in Computer Vision (CS323), Stanford University, Fall 2009
- Instructor, Computer Vision (COS429), Princeton University, Fall 2007, Fall 2008
- Instructor, High-Level Recognition in Computer Vision (COS598), Princeton University, Spring 2007
- Instructor, Computer Vision (ECE546), University of Illinois at Urbana-Champaign, Fall 2006
- Instructor, Special Topics: Readings in Computer Vision and Learning (ECE598), University of Illinois at Urbana-Champaign, Fall 2005
- Teaching Assistant, California Institute of Technology, 2000 - 2003

FUNDING

- **IARPA (sub to kitware)**, “ALADDIN-Automated Low-Level Analysis and Description of Diverse Intelligence.” (PI), \$1,125,000, 2010.10-2015.09
- **DARPA N10AP20035**, “IBOT: Image-Based Object Tracking” (PI), \$1,155,000, 2010.07-2015.04
- **DOA (sub to UCB)**, “Recognizing Activities with Probabilistically Grounded Visual Intelligence Models.” (co-PI), \$2,000,000, 2010.06 – 2015.06
- **Dept of the Navy (sub to UCLA)**, “ Knowledge Representation, Reasoning and Learning for Understanding Scenes and Events” (PI), \$1,335,000, 2010.08-2013.07
- **DARPA N10AP20023**, “Understand Visual Scenes: Combining Data-driven Learning and Evaluation with Hierarchical Image Modeling.” (PI), \$100,000, 2010.04 – 2012.04
- **Google Research Award**, “Towards large-scale image understanding and annotation.” \$150,000.00, 2010.
- **NSF CAREER Award IIS-0845230**, “Telling the story of a visual world: event classification and itegrated image understanding.” \$548,795.00, 2009-07 – 2013.06
- **NIH R01 EY019429**, “CRCNS: fMRI pattern analysis of neural correlates of natural scene categories.” (PI, co-PI: Diane Beck (UIUC)), \$1,148,972, 2008.09 – 2011
- **Eastman Kodak Company**, “Image and video understanding via hierarchical representation and flexible model learning.” \$100,000.00, 2009-2010
- **UIUC Critical Research Initiative (CRI)**, “Pattern Recognition and Mind Reading: An Emerging Field” (co-PI with Diane Beck), \$50,000, 2006.07 – 2007.07

PUBLICATIONS

Thesis

- **L. Fei-Fei**. Visual Recognition: Computational Models and Human Psychophysics. Ph.D. Thesis, Electrical Engineering Dept., California Institute of Technology, February, 2005.

Book Chapters, Refereed Journals and Conference Papers

- 1) J. Deng, A. Berg, S. Santheesh, and **L. Fei-Fei**. Fast and Balanced: Efficient Label Tree Learning for Large Scale Object Recognition. *Proceedings of the Neural Information Processing Systems (NIPS)*. 2011
- 2) B. Zhao, **L. Fei-Fei** and E.P. Xing. Large-Scale Category Structure Aware Image Categorization. *Proceedings of the Neural Information Processing Systems (NIPS)*. 2011
- 3) B. Yao, X. Jiang, A. Khosla, A.L. Lin, L.J. Guibas, and **L. Fei-Fei**. Human Action Recognition by Learning Bases of Action Attributes and Parts. *International Conference on Computer Vision (ICCV)*. 2011.
- 4) G. Kim, E.P. Xing, **L. Fei-Fei**, and T. Kanade. Distributed cosegmentation vis submodular optimization on anisotropic diffusion. *IEEE International Conference on Computer Vision (ICCV)*. 2011.
- 5) M. Savva, N. Kong, A. Chhajta, **L. Fei-Fei**, M. Agrawala, and J. Heer. ReV ReVision: Automated Classification, Analysis and Redesign of Chart Imagesision:

- Automated Classification, Analysis and Redesign of Chart Images. *ACM Symposium on User Interface Software and Technology (UIST)*. 2011
- 6) B. Yao, A. Khosla, and **L. Fei-Fei**. Classifying Actions and Measuring Action Similarity by Modeling the Mutual Context of Objects and Human Poses. *International Conference on Machine Learning (ICML)*. 2011.
 - 7) D. B. Walther, B. Chai, E. Caddigan, D. M. Beck and **L. Fei-Fei**. Simple line drawings suffice for functional MRI decoding of natural scene categories. *Proc. Nat. Acad. of Sci (PNAS)*. doi: 10.1073/pnas.1015666108, vol. 108 (no. 23): pp9661-9666. 2011.
 - 8) J. Deng, A. Berg, and **L. Fei-Fei**. Hierarchical Semantic Indexing for Large Scale Image Retrieval. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2011.
 - 9) B. Yao, A. Khosla, and **L. Fei-Fei**. Combining Randomization and Discrimination for Fine-Grained Image Categorization. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2011.
 - 10) B. Zhao, **L. Fei-Fei**, and E.P. Xing, Online Detection of Unusual Events in Videos via Dynamic Sparse Coding. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2011.
 - 11) L.-J. Li, H. Su, E.P. Xing and **L. Fei-Fei**, Object Bank: A High-Level Image Representation for Scene Classification & Semantic Feature Sparsification. *Proceedings of the Neural Information Processing Systems (NIPS)*. 2010
 - 12) J. Zhu, L.-J. Li, **L. Fei-Fei** and E.P. Xing, Large Margin Learning of Upstream Scene Understanding Models. *Proceedings of the Neural Information Processing Systems (NIPS)*. 2010.
 - 13) J. C. Niebles, C.-W. Chen and **L. Fei-Fei**. Modeling Temporal Structure of Decomposable Motion Segments for Activity Classification. *Proceedings of the 12th European Conference of Computer Vision (ECCV)*. 2010.
 - 14) B. Zhao, **L. Fei-Fei** and E. P. Xing. Image Segmentation with Topic Random Fields. *Proceedings of the 12th European Conference of Computer Vision (ECCV)*. 2010.
 - 15) J. Deng, A. Berg, K. Li and **L. Fei-Fei**. What does classifying more than 10,000 image categories tell us? *Proceedings of the 12th European Conference of Computer Vision (ECCV)*. 2010.
 - 16) **L. Fei-Fei** and L.-J. Li. What, Where and Who? Telling the Story of an Image by Activity Classification, Scene Recognition and Object Categorization. *Book chapter in "Studies in Computational Intelligence- Computer Vision"*. Volume 285/2010, Springer, 2010.
 - 17) S. Savarese, and **L. Fei-Fei**. Multi-view Object Categorization and Pose Estimation. *Book chapter in "Studies in Computational Intelligence- Computer Vision"*. Volume 285/2010, Springer, 2010.
 - 18) R. Fergus, **L. Fei-Fei**, P. Perona and A. Zisserman. Learning object categories from Internet image searches. *Proc. Of IEEE, Special Issue on Internet Vision. Vol 98/8*. 2010.
 - 19) B. Yao and **L. Fei-Fei**. Modeling mutual context of object and human pose in human-object interaction activities. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2010.
 - 20) B. Yao and **L. Fei-Fei**. Grouplet: a structured image representation for recognizing human and object interactions. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2010.
 - 21) L.J. Li, C. Wang, Y. Lim, D. Blei and **L. Fei-Fei**. Building and Using a Semantivisual image hierarchy. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2010.

- 22) J.C. Niebles, L. Chen and **L. Fei-Fei**. Modeling temporal structure of decomposable motion segments for activity classification. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2010.
- 23) R. Socher and **L. Fei-Fei**. Connecting Modalities: Semi-supervised Segmentation and Annotation of Images Using Unaligned Text Corpora. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2010.
- 24) D. B. Walther, D. M. Beck, and **L. Fei-Fei**. To err is human: investigating neural function by correlating error patterns with human behavior. in: Nikolaus Kriegeskorte and Gabriel Kreiman (eds.), *Understanding visual population codes – Toward a common multivariate framework for cell recording and functional imaging*, MIT Press, Cambridge, Massachusetts. 2010.
- 25) B. Yao, D.B. Walther, D.M. Beck*, **L. Fei-Fei***. Hierarchical Mixture of Classification Experts Uncovers Interactions between Brain Regions. *Proceedings of the Neural Information Processing Systems (NIPS)*. 2009. (* indicates equal contribution)
- 26) B. Chai†, D.B. Walther†, D.M. Beck*, **L. Fei-Fei***. Exploring Functional Connectivity of the Human Brain using Multivariate Information Analysis. *Proceedings of the Neural Information Processing Systems (NIPS)*. 2009. (†,* indicates equal contribution)
- 27) L.-J. Li and **L. Fei-Fei**. OPTIMOL: automatic Online Picture collection via Incremental MOdel Learning. *International Journal of Computer Vision (IJCV)*. 2009.
- 28) H. Su, M. Sun, S. Savarese and **L. Fei-Fei**. A Multi-View Probabilistic Model for 3D Object Classes. *IEEE Inter. Conf. Comp. Vision (ICCV)*. 2009
- 29) M. Peelen, **L. Fei-Fei**, and S. Kastner. Neural mechanisms of rapid natural scene categorization in human visual cortex. *Nature*. doi:10.1038/nature08103. 2009.
- 30) D. B. Walther, E. Caddigan, **L. Fei-Fei***, and D. M. Beck*. Natural scene categories revealed in distributed patterns of activity in the human brain. *Journal of Neuroscience*, 29(34):10573-10581, 2009.
- 31) L.-J. Li, R. Socher and **L. Fei-Fei**. Towards Total Scene Understanding: Classification, Annotation and Segmentation in an Unsupervised Framework. *IEEE Inter.Conf. Comp. Vision and Pattern Recog (CVPR)*. 2009
- 32) C. Wang, D. Blei and **L. Fei-Fei**. Simultaneous Image Classification and Annotation. *IEEE Inter.Conf. Comp. Vision and Pattern Recog*. 2009
- 33) J. Deng, W. Dong, R. Socher, L.-J. Li, K. Li and **L. Fei-Fei**. ImageNet: A Preview of a Large-Scale Hierarchical Database. *IEEE Inter.Conf. Comp. Vision and Pattern Recog (CVPR)*. 2009
- 34) M. Sun, H. Su, S. Savarese and **L. Fei-Fei**. A Multi-View Probabilistic Model for 3D Object Classes. *IEEE Inter.Conf. Comp. Vision and Pattern Recog (CVPR)*. 2009
- 35) J.C. Niebles, B. Han, A. Ferencz and **L. Fei-Fei**. Extracting Moving Humans from Internet Videos. *IEEE European Conf. Computer Vision (ECCV)*, 2008.
- 36) B. Collins, J. Deng, K. Li and **L. Fei-Fei**. Towards scalable dataset construction: An active learning approach. *IEEE European Conf. Computer Vision (ECCV)*, 2008.
- 37) S. Savarese and **L. Fei-Fei**. View synthesis for recognizing unseen poses of object classes. *IEEE European Conf. Computer Vision (ECCV)*, 2008.
- 38) J.C. Niebles, H. Wang and **L. Fei-Fei**, Unsupervised Learning of Human Action Categories Using Spatial-Temporal Words. *International Journal of Computer Vision (IJCV)*, DOI 10.1007/s11263-007-0122-4, 2008.

- 39) S. Savarese, A. Del Pozo, J.C. Niebles, **L. Fei-Fei**, "Spatial-Temporal Correlations for Unsupervised Action Classification", *IEEE Workshop on Motion and Video Computing*, Copper Mountain, Colorado January 8-9, 2008.
- 40) S. Savarese and **L. Fei-Fei**. 3D generic object categorization, localization and pose estimation. *IEEE Intern. Conf. in Computer Vision (ICCV)*. 2007.
- 41) L. J. Li and **L. Fei-Fei**. What, where and who? Classifying event by scene and object recognition. *IEEE Intern. Conf. in Computer Vision (ICCV)*. 2007.
- 42) L. Cao and **L. Fei-Fei**. Spatially coherent latent topic model for concurrent object segmentation and classification. *IEEE Intern. Conf. in Computer Vision (ICCV)*. 2007.
- 43) D. B. Walther and **L. Fei-Fei**. Measuring the cost of deploying top-down visual attention. *Journal of Vision*, 7(11):9, 1-12, <http://journalofvision.org/7/11/9/>, doi:10.1167/7.11.9. 2007.
- 44) **L. Fei-Fei**, R. Fergus and P. Perona. Learning generative visual models for 101 object categories. *Computer Vision and Image Understanding (CVIU)*. 2007.
- 45) L.J. Li, J.C. Niebles and **L. Fei-Fei**. OPTIMOL: a framework for Online Picture collection via Incremental Model Learning., *Association for the Advancement of Artificial Intelligence (AAAI) 2007 Robot Competition and Exhibition*, 2007
- 46) L.J. Li, G. Wang and **L. Fei-Fei**. OPTIMOL: automatic Object Picture collection via Incremental Model Learning. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2007. (*)
- 47) J.C. Niebles and **L. Fei-Fei**. A hierarchical model of shape and appearance for human action classification. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2007.
- 48) **L. Fei-Fei**, Iyer, A., Koch, C., & Perona, P. What do we perceive in a glance of a real-world scene? *Journal of Vision*, 7(1):10, 1-29, <http://journalofvision.org/7/1/10/>, doi:10.1167/7.1.10. 2007.
- 49) J.C. Niebles, H. Wang, **L. Fei-Fei**. Unsupervised learning of human action categories using spatial-temporal words. *British Machine Vision Conference (BMVC) 2006*.
- 50) A. Kushal, M. Raturkar, J. Ponce, T. Huang and **L. Fei-Fei**. Audio-Visual Speaker Localization Using Graphical Models. *Int. Conf. Patt. Recog.* 2006.
- 51) J. Tu, A. Ivanovic, T. Huang, and **L. Fei-Fei**. Variational Shift Invariant Probabilistic PCA for Face Recognition. *Int. Conf. Patt. Recog.* 2006
- 52) **L. Fei-Fei**. Knowledge transfer in learning to recognize visual object classes. *IEEE ICDL*. 2006
- 53) G. Wang, Y. Zhang, and **L. Fei-Fei**. Using dependent local regions for categorizing objects in a generative framework. *IEEE Computer Vision and Pattern Recognition (CVPR)*. 2006.
- 54) **L. Fei-Fei**, R. Fergus and P. Perona. One-Shot Learning of 100 Object Categories. *IEEE Trans. Pattern Analysis and Machine Intelligence (PAMI)*. Vol28(4), 594 - 611, 2006.
- 55) R. VanRullen, L. Reddy and **L. Fei-Fei**. Binding for natural objects. *Vision Research*. Vol45(25-26), 3133-3144. 2005.
- 56) **L. Fei-Fei**, R. Fergus, and P. Perona. Learning generative visual models for 101 object categories. *Computer Vision and Image Understanding (CVIU)*, 2006.
- 57) R. Fergus, **L. Fei-Fei**, P. Perona and A. Zisserman. Learning Object Categories from Google's Image Search. *IEEE Intern. Conf. in Computer Vision (ICCV)*. 2005.
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OTHER EXPERIENCES

Researcher, One H.E.A.R.T. Foundation, Utah, USA - Tibet (2002 – 2004)

- Involved in ethnographic researches on maternal health in rural and nomadic Tibet.

Principle Investigator, Tibetan Medicine Hospital (Mentsikhang) Lhasa, Tibet (1999 – 2000),

- A clinical study on Tibetan medicine treatment for *Helicobacter pylori* infection in rural and nomadic Tibetan population.