CURRICULUM VITAE 07/31/2019

Dimitris Samaras

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Born December 4th, 1969, Thessaloniki, Greece. US and Greek citizen

Education:

Ph.D., Computer Science, University of Pennsylvania, January 2001. Advisor: **Dimitris Metaxas**
M.S., Computer Science, Northeastern University, Boston, MA, June 1994.
Diploma, Computer Science and Engineering, University of Patras, Greece, June 1992.

Experience:

9/19 - present SUNY Empire Innovation Professor, Computer Science Department, Stony Brook University.
9/06 - 8/19 Associate Professor, Computer Science Department, Stony Brook University.
9/04 - Present Director, Computer Vision Lab, Stony Brook Univ. (formerly Image Analysis Lab).
1/12 - 12/15 Digiteo Chair, Ecole Centrale de Paris, France.
1/08 - 1/09, 7/11, 9/16 - 8/17 Visiting Professor, Ecole Centrale de Paris, France.
7/10 Visiting Professor, Computer Vision Center, Barcelona, Spain.
10/09, 6/10 Visiting Professor, Ecole Centrale de Lyon, France.
9/00 - 8/06 Assistant Professor, Computer Science Department, Stony Brook University.
9/95 - 9/00 Research assistant for prof. D. Metaxas, University of Pennsylvania.
9/92 - 6/94 Research assistant for profs. Gauch and York. Northeastern University.
6/91 - 9/91 System software development for a high energy particle accelerator, CERN, Switzerland.
9/90 - 3/92 Computer Center Operator. University of Patras, Greece.
6/90 - 8/90 Programmer, National Electricity Company, Drama, Greece.

Summary of Research Accomplishments:

My research up to now has focused on explaining visual data for Computer Vision, Machine Learning and Medical Image Analysis, through appropriate physical and statistical models. Such models can be deformable models, illumination models, generative models for motion and appearance, learnt feature models, etc. Apart from my long running interest in the interaction of illumination and 3D shape in images, I have worked extensively in 3D shape reconstruction, tracking and recognition using a variety of techniques to model deformation, including 3D facial expressions, 3D hand

gesture tracking and recognition of complex interactions between people in 3D data such as kicking, handshakes, package exchanges etc. My general interest in human modeling has led to exciting interdisciplinary collaborations with psychologists who collect and study visual data about human behavior through multiple modalities such as eye-trackers and fMRI brain imaging. Appropriate models in such cases are based on domain knowledge provided by experts in that field. In work in my group with fMRI data we have demonstrated that it is possible to classify different groups of human subjects performing the same tasks based on the observed 3D fMRI BOLD images. At the same time we have explored functional connectivity between brain regions by searching for conditional probabilistic dependencies between such regions, described by Gaussian Graphical Models, suitable to high-dimensional datasets. Recently we have been developing Deep Learning solutions for Digital Pathology image analysis.

Publication Summary:

2 book chapters,
33 peer-reviewed journals (23 high impact),
104 peer-reviewed conference papers in total:
- **55 top-ranked** conferences (acceptance rate under 30%) including:
- **11 oral** presentations in the top ranked conferences (acceptance rate 2-5%)

Google Scholar citations (07/31/2019): **5799**,
Google Scholar h-index **43**, i-10 index **87**.

Book Chapters:

1. Honorio J., Samaras D., Rish I., Cecchi G. Variable Selection in Gaussian Markov Random Fields. In *Log-Linear Models, Extensions and Applications.* (eds. Aravkin A., Choromanska, A., Deng L., Heigold G., Jebara T., Kanevski D., Wright S.) MIT Press, 2018 (to appear)

2. Wang, C., Zeng, Y., Samaras, D., Paragios, N. Modeling Shapes with Higher-Order Graphs: Methodology and Applications. In *Shape Perception in Human and Computer Vision: An Interdisciplinary Perspective* (eds. Dickinson & Pizlo), Springer, 2013.

Journal Publications:

1. Wang, M., Shu, Z., Cheng, S., Panagakis, Y., Samaras, D., Zafeiriou, S., An Adversarial Neuro-Tensorial Approach for Learning Disentangled Representations. In *International Journal of Computer Vision (IJCV)*, June 2019, vol. 127, no. 6-7,, pp 743-762. (2017 Impact Factor: 11.54)

2. Hou, L., Nguyen, V., Kanevsky, A., Samaras, D., Kurc, T., Zhao, T., Gupta, R., Gao, Y., Chen, W., Foran, D., Saltz, J., Sparse Autoencoder for Unsupervised Nucleus Detection and Representation in Histopathology Images. In *Pattern Recognition*, vol. 86, February 2019, pp 188-200. (2017 Impact Factor: 3.96)

3. Saltz, J., Gupta, R., Hou, L., Kurc, T.,. Singh, P., Nguyen, V., Samaras, D., Shroyer, K.R., Zhao, T., Batiste, R., Van Arnam, J., Shmulevich, I., Rao, A., Lazar, A., Sharma, A., Thors-

son, V.. Cancer Genome Atlas Research Network. Spatial Organization and Molecular Correlation of Tumor-Infiltrating Lymphocytes Using Deep Learning on Pathology Images. In *Cell Reports*, vol. 23, no. 1, April 2018, pp 181-193.e7. (2017 Impact Factor: 8.03)

4. Yago, T., Hoai, M., Samaras, D., Leave-one-out Kernel Optimization for Shadow Detection and Removal. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, March 2018, vol. 40, no. 3, pp 682-695 (2017 Impact Factor: 9.46)

5. Shu, Z., Hadap, S., Shechtman, E., Sunkavalli, K., Paris, S., Samaras, D., Portrait Lighting Transfer using a Mass Transport Approach. In *ACM Transactions on Graphics (TOG)* vol. 36, no. 4, article 145a, July 2017. (2017 Impact Factor: 4.39)

6. Abraham, A., Milham, M., Di Martino, A., Craddock, R.C., Samaras, D., Thirion, B., Varoquaux, G., Deriving robust biomarkers from multi-site resting-state data: An Autism-based example. In *NeuroImage*, vol. 147, February 2017, pp 736-745. (2017 Impact Factor: 5.43)

7. Zeng, Y., Wang, C., Gu, X., Samaras, D., Paragios, N., Higher-order Graph Principles towards Non-rigid Surface Registration. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, December 2016, vol. 38, no. 12, pp 2416-2429. (2017 Impact Factor: 9.46)

8. Shu, Z., Shechtman, E., Samaras, D., Hadap, S., EyeOpener: Editing Eyes in the Wild. In *ACM Transactions on Graphics (TOG)* vol. 36 no. 1, article 1 September 2016. (2017 Impact Factor: 4.39)

9. Belilosky, E. Gkirtzou, K., Misyrlis, M., Konova, A., Blaschko, M., Honorio, J., Alia-Klein, N., Goldstein, R.Z., Samaras, D., Predictive sparse modeling of fMRI data for improved classification, regression, and visualization using the k-support norm. In *Computerized Medical Imaging and Graphics*, vol. 46, Part 1, pp. 40-46, December 2015. (2017 Impact Factor: 2.44)

10. Lee, CS., Samaras, D.: Analysis and Control of Facial Expressions using Decomposable nonlinear Generative Models. In *International Journal of Pattern Recognition and Artificial Intelligence* vol. 28, no 5, August 2014. (2017 Impact Factor: 1.03)

11. Yu, CP., Samaras, D, Zelinsky, G., Modeling visual clutter perception using proto-object segmentation. In *Journal of Vision* vol. 14, no 5. article 4, 2014. (2017 Impact Factor: 2.27)

12. Zelinsky, G., Peng, Y., Samaras, D. Eye can read your mind: Decoding gaze fixations to reveal categorical search targets. In *Journal of Vision*, vol. 13, no. 14, article 10, 2013. (2017 Impact Factor: 2.27)

13. Yun, K, Peng, Y., Samaras, D., Zelinsky, G., Tamara, B., Exploring the role of gaze behavior and object detection in scene understanding. In *Frontiers in Psychology*, vol. 4, no. 917, 2013. (2017 Impact Factor: 2.1)

14. Zelinsky, G., Peng, Y., Berg, AC., Samaras, D., Modeling guidance and recognition in categorical search: Bridging human and computer object detection. In *Journal of Vision*, October 2013, vol. 13, no. 3, article 30. (2017 Impact Factor: 2.27)

15. Zelinsky, G., Adeli, H., Peng, Y., Samaras, D., Modelling eye movements in a categorical search task. In *Philosophical Transactions of the Royal Society B* October 2013, vol. 368, no. 1628. (2017 Impact Factor: 5.67)

16. Han, X., Berg, A., Oh, H., Samaras, D., Leung, H.C. Multi-voxel pattern analysis of selective representation of visual working memory in ventral temporal and occipital regions. In *NeuroImage*, vol. 73, June 2013, pp 8-15. (2017 Impact Factor: 5.43)

17. Panagopoulos, A.,Wang, C., Samaras, D., Paragios, N.,Simultaneous Cast Shadows, Illumination and Geometry Inference Using Hypergraphs. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, February 2013, vol. 35, no. 2. pp 437-449. (2017 Impact Factor: 9.46)

18. Honorio, J, Tomasi, D., Goldstein, R.Z., Leung, H.C., Samaras, D., Can a Single Brain Region Predict a Disorder? In *IEEE Transactions in Medical Imaging (TMI)*, November 2012, vol.31, no 4, pp. 2062-2072. (2017 Impact Factor: 6.13)

19. Goldstein, R.Z., Woicik, P.A., Maloney, T., Tomasi, D., Alia-Klein, N., Shan, J., Honorio, J., Samaras, D., Wang, R., Telang, F., Wang, G.-J., Volkow, N.D., Given with a cognitive task, methylphenidate corrects prefrontal dysfunction in cocaine addiction. In *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, September 2010, vol. 107, no 38, pp.16667-16672. (2017 Impact Factor: 9.5)

20. Zeng, W., Gu, X., Samaras, D., Ricci Flow for 3D Shape Analysis. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)* April 2010, vol. 32 no. 4, pp. 662-677 (2017 Impact Factor: 9.46)

21. Wang, Y., Zhang, L., Liu, Z., Hua, G., Wen, Z., Zhang, Z., Samaras, D., Face Relighting from a Single Image under Arbitrary Unknown Lighting Conditions. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)* November 2009, vol. 31, no. 1, pp. 1968-1984 (2017 Impact Factor: 9.46)

22. Zeng, Y., Samaras, D., Chen, W., Peng, Q., Topology cuts: A novel min-cut/max-flow algorithm for topology preserving segmentation in N-D images. In *Computer Vision and Image Understanding (CVIU)*, October 2008, Volume 112, Number 1, pp. 81-90. (2008 Impact Factor: 2.22)

23. Wang, Y., Samaras, D., Estimation of Multiple Directional Illuminants from a Single Image. In *Image and Vision Computing (IVC)* . September 2008, Volume 26, number 9,pp. 1179-1195. (2008 Impact Factor: 1.496)

24. Moreno-Noguer, F., Sanfeliu A., Samaras D., Dependent Multiple Cue Integration for Robust Tracking. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)* April 2008, vol. 30, number 4, pp. 670-685. (2008 Impact Factor: 5.96)

25. Wang, Y., Gupta, M., Zhang, S., Wang, S., Gu, X., Samaras, D., Huang, P., Harmonic maps for high precision tracking of non-rigid 3D shapes. In *International Journal of Computer Vision (IJCV)* , March 2008, vol. 76, number 3, pp. 283-300. (2008 Impact Factor: 5.358)

26. Wang, S., Wang, Y., Jin, M., Gu, X., Samaras, D. Conformal Geometry and Its Applications on 3D Shape Matching and Recognition. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)* July 2007, vol. 29, number 7, pp. 1209-1220. (2008 Impact Factor: 5.96)

27. Moreno-Noguer, F., Sanfeliu A., Samaras D., Integration of Deformable Contours and a Multiple Hypotheses Fisher Color Model for Robust Tracking in Varying Illuminant Environments. In *Image and Vision Computing (IVC)* March 2007, vol 25, number 3, pp. 285-296. (2008 Impact Factor: 1.496)

28. Goldstein, R.Z., Alia-Klein, N., Tomasi, D., Zhang, L., Cottone, L.A., Maloney, T., Telang, F., Caparelli, E.C., Chang, L., Ernst, T., Samaras, D., Squires, N.K., Volkow, N.D. Decreased prefrontal cortical sensitivity to monetary reward is associated with impaired motivation and self-control in cocaine addiction. In *The American Journal of Psychiatry,* January 2007; 164:43-51. (2008 Impact Factor: 10.545)

29. Pfister HP., Samaras, D., : Guest Editorial. In *The Visual Computer* 22(6): 371-371 (2006)

30. Zhang, L., Samaras, D., Face Recognition from A Single Training Image under Arbitrary Unknown Lighting using Spherical Harmonics. In *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI),* March 2006, vol. 28, number 3, pp. 351-364. (2008 Impact Factor: 5.96)

31. Wang, Y., Huang, X., Lee, C.S., Zhang, S., Li, Z., Samaras, D., Metaxas, D., Elgammal, A., Huang, P., High Resolution Acquisition, Learning and Transfer of Dynamic 3-D Facial Expressions In *Computer Graphics Forum,* Sept 2004 vol. 23, number 3, pp. 677-686. (Eurographics 2004, issue, acceptance rate 19%). (2008 Impact Factor: 1.86)

32. Wang Y., Samaras D., Estimation of Multiple Directional Light Sources for Synthesis of Augmented Reality Images. In *Graphical Models* 65, July 2003, pp. 185-205. (7% of Pacific Graphics papers were invited). (2008 Impact Factor: 0.913)

33. Samaras, D., Metaxas, D., Incorporating Illumination Constraints in Deformable models for Shape and Light Direction Estimation. In *IEEE Transactions on Pattern Recognition and Machine Intelligence (PAMI)*, February 2003, pp. 247-264. (2008 Impact Factor: 5.96)

Refereed Conference Publications:

1. Le., H., Samaras, D., Shadow Removal via Shadow Image Decomposition. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2019*, Seoul, South Korea. (acceptance rate 25%)

2. Das, S., Ma, K., Shu, Z., Samaras., D., Shilkrot, R., DewarpNet: Single-Image Document Unwarping with Stacked 3D and 2D Regression Networks. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2019*, Seoul, South Korea. (acceptance rate 25%)

3. Liu, H., Gu, X., Samaras, D. WGAN with Quadratic Transport Cost. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2019*, Seoul, South Korea. (acceptance rate 25%)

4. Han, L., Samaras, D., Gupta, R., Kurc, T., Shroyer, K., Saltz, J., Pancreatic Cancer Detection in WSIs Using Noisy Label Annotations. In *Proceedings of the International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) 2013*, Shenzen, China. (acceptance rate 31%)

5. Kelton, C., Wei, Z., Ahn, S., Balasubramanian, A., Das, S., Samaras, D., Zelinsky, G., Reading detection in real-time. In *Proceedings of the 11th ACM Symposium on Eye Tracking Research & Applications (ETRA) 2019*, Denver, CO.

6. Hou, L., Agarwal, A., Samaras, D., Kurc, T., Gupta, R., Saltz, J., Robust Histopathology Image Analysis: to Label or to Synthesize? In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019*, Long Beach, CA. (oral presentation). (acceptance rate 6%)

7. Zelinsky, G., Yang, Z., Huang, L., Chen, Y., Ahn, S., Wei, Z, Adeli, H., Samaras, D., Hoai, M., Benchmarking Gaze Prediction for Categorical Visual Search. In *Proceedings of the Mutual Benefits of Cognitive and Computer Vision Workshop (MBCCV) 2019*, (in conjunction with CVPR 2019), Long Beach, CA.

8. Park, S., Bhattacharya, A., Yang, Z., Dasari, M., Das, S.,, Samaras, D., Advancing User Quality of Experience in 360-degree Video Streaming. In *Proceedings of IFIP Networking (NETWORKING), 2019*, Warsaw, Poland.

9. Ma, S., Wei, Z., Tian, F., Fan, X., Zhang, J., Shen, X., Lin, Z., Huang, J., Mech, R.,Samaras, D., Wang, H., SmartEye: Assisting Instant Photo Taking via Integrating User Preference with Deep View Proposal Network. In *Proceedings of the 37th Annual ACM Conference on Human Factors in Computing Systems (CHI) 2019*, Glascow, UK. (**CHI Honorable Mention**). (acceptance rate 5%)

10. Malkin, K., Robinson, L., Hou, L., Soobitsky R., Czawlytko, J., Samaras, D., Saltz, J., Joppa, L., Jojic, N., Label super-resolution networks, In *Proceedings of the International Conference in Learning Representations (ICLR) 2019*, New Orleans, LA. (acceptance rate 31%)

11. Wei, Z., Wang, B., Hoai, M., Zhang, J., Lin, Z., Shen, X., Mech, R.,Samaras, D., Sequence-to-Segment Networks for Segment Detection. In *Advances in Neural Information Processing Systems (NeurIPS), 2018*, Montreal, Canada. (acceptance rate 21%)

12. Shu, Z., Sahasrabudhe, M., Guler, R., Samaras, D., Paragios, N., Kokkinos, I., Deforming Autoencoders: Unsupervised Disentangling of Shape and Appearance. In *Proceedings of the European Conference on Computer Vision (ECCV) 2018*, Munich, Germany. (acceptance rate 31%)

13. Le, H., Yago, T., Nguyen, V., Samaras, D., A+D Net: Training a Shadow Detector with Adversarial Shadow Attenuation. In *Proceedings of the European Conference on Computer Vision (ECCV) 2018*, Munich, Germany. (acceptance rate 31%)

14. Liu, H., Gu, X., Samaras, D., A Two-Step Computation of the Exact GAN Wasserstein Distance. In *Proceedings of International Conference on Machine Learning, (ICML) 2018* Stockholm, Sweden. (acceptance rate 25%).

15. Wei, Z., Zhang, J., Hoai, M., Shen, X., Lin, Z., Mech, R., Samaras, D., Good View Hunting: Learning Photo Composition from 1 Million View Pairs, In *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018*, Salt Lake City, UT. (acceptance rate 29%).

16. Ma, K., Shu, Z., Bai, X., Wang, J., Samaras, D., DocUNet: Document Image Unwarping via A Stacked U-Net. In *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018*, Salt Lake City, UT. (acceptance rate 29%).

17. Hou, L., Yu, CP., Samaras, D., Squared Earth Mover's Distance Loss for Training Deep Neural Networks on Ordered-Classes, In *Advances in Neural Information Processing Systems (NIPS), Learning on Distributions, Functions, Graphs and Groups Workshop (LDFGG) 2017*, Long Beach, CA.

18. Nguyen, V., Yago, T., Zhao, M., Hoai, M., Samaras, D., Shadow Detection with Conditional Generative Adversarial Networks. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2017*, Venice, Italy. (oral presentation). (acceptance rate 2%).

19. Le, H., Yu, CP., Zelinsky, G., Samaras, D., Co-localization with Category-Consistent CNN Features and Geodesic Distance Propagation, In *Proceedings of the Workshop on CEFRL: Compact and Efficient Feature Representation and Learning in Computer Vision*, (in conjunction with ICCV 2017), Venice, Italy.

20. Ma, K., Hoai, M., Samaras, D., Large-scale Continual Road Inspection: Visual Infrastructure Assessment in the Wild, in *Proceedings of British Machine Vision Conference (BMVC), 2017*, London, UK.

21. Shu, Z., Yumer, E., Sunkavalli, K., Hadap, S., Shechtman, E., Samaras, D., Neural Face Editing with Intrinsic Image Disentangling. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017)*, Honolulu, HI. (oral presentation). (acceptance rate 3%)

22. Hou, L., Samaras, D., Kurc, T., Gao, Y., Saltz, J., ConvNets with Smooth Adaptive Activation Functions for Regression. In *Proceedings of the 20th International Conference in Artificial Intelligence and Statistics (AISTATS), 2017*. Fort Lauderdale, FL.

23. Wen, S., Kurc, T., Hou, L., Saltz, J., Gupta, R., Batiste, R., Zhao, T., Nguyen, V., Samaras, D., Zhu, W., Comparison of Different Classifiers with Active Learning to Support Quality Control in Nucleus Segmentation in Pathology Images. In *Proceedings of AMIA Joint Summits on Translational Science, 2017*, San Francisco, CA, pp. 227-236.

24. Murthy, V., Hou, L., Samaras, D., Kurc, T., Saltz, J., Center-Focusing Multi-task CNN with Injected Features for Classification of Glioma Nuclear Images. In *Proceedings of the IEEE Winter Conference on Applications of Computer Vision (WACV), 2017*, Santa Rosa, CA.

25. Wei, Z., Adeli, H., Zelinsky, G., Hoai, M., Samaras, D., Learned Region Sparsity and Diversity Also Predict Visual Attention. In *Advances in Neural Information Processing Systems (NIPS), 2016*, Barcelona, Spain. (acceptance rate 24%)

26. Le, H., Nguyen, V., Yu, CP., Samaras. D., Geodesic Distance Histogram Feature for Video Segmentation. In *Proceedings of the Asian Conference on Computer Vision (ACCV) 2016*, Taipei, Taiwan. (acceptance rate 25%)

27. Yago, T., Hou, L., Yu, CP., Hoai, M., Samaras, D., Large-scale training of shadow detectors with noisily-annotated shadow examples, In *Proceedings of the European Conference on Computer Vision (ECCV) 2016*, Amsterdam, Netherlands. (acceptance rate 24%)

28. Hou, L., Singh, K., Samaras, D., Kurc, T., Gao, Y., Seidman, R., Saltz, J., Automatic histopathology image analysis with CNNs. In *Proceedings of the IEEE New York Scientific Data Summit* 2016.

29. Hou, L., Samaras, D., Kurc, T., Gao, Y., Davis, J., Saltz, J., Patch-based Convolutional Neural Network for Whole Slide Tissue Image Classification. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016)*, Las Vegas, NV. (spotlight presentation) (acceptance rate 10%)

30. Yago, T., Hoai, M., Samaras, D., Noisy Label Recovery for Shadow Detection in Unfamiliar Domains. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016*, Las Vegas, NV. (acceptance rate 30%)

31. Ryoo, J., Yun, K., Samaras, D., Das, S., Zelinsky, G., Design and Evaluation of a Foveated Video Streaming Service for Commodity Client Devices. In *Proceedings of the ACM Multimedia Systems Conference (MMSys), 2016*, Klagenfurt am Worthersee., Austria.

32. Ma, K.,Yago, T., Samaras, D., Petrucci, M., Magnus, D., Texture Classification for Rail Surface Condition Evaluation, In *Proceedings of the IEEE Winter Conference on Applications of Computer Vision (WACV), 2016*, Lake Placid, NY.

33. Yago, T., Hoai, M., Samaras, D., Leave-One-Out Kernel Optimization for Shadow Detection. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2015*, Santiago, Chile. (oral presentation). (acceptance rate 3%)

34. Yu, CP., Le, H.., Zelinsky, G., Samaras, D., Efficient Video Segmentation using Parametric Graph Partitioning. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2015*, Santiago, Chile. (acceptance rate 30%)

35. Kwon, H., Yun, K., Hoai, M., Samaras, D., Recognizing Cultural Events in Images: a Study of Image Categorization Models. In *Proceedings of the Computer Vision and Pattern Recognition ChaLearn Looking at People Workshop*, (in conjunction with CVPR 2015), Boston, MA.

36. Ge, G., Yun, K.,, Samaras. D., Zelinsky, G., Action Classification in Still Images Using Human Eye Movements. In *Proceedings of the 2nd Vision Meets Cognition Workshop*, (in conjunction with CVPR 2015), Boston, MA.

37. Papadopoulos, C., Choi, H., Sinha, J., Yun, K., Kaufman, A., Samaras, D., Laha, B., Practical Chirocentric 3DUI Platform for Immersive Environments. In *Proceedings of the IEEE Symposium on 3D User Interfaces (3DUI)*, 2015, Arles, France.

38. Zhang, W., Huang, D., Samaras, D., Morvan, JM., Wang, Y., Chen, L., 3D assisted face recognition via progressive pose estimation. In *Proceedings of the IEEE International Conference on Image Processing (ICIP) 2014*, Paris. France.

39. Misyrlis, M., Konova, A., Blaschko, M., Honorio, J., Alia-Klein, N., Goldstein, RZ., Samaras, D., Predicting cross-task behavioral variables from fMRI data using the k-support norm. In *Proceedings of the 2nd International Workshop on Sparsity Techniques in Medical Imaging (STMI) 2014* (in conjunction with MICCAI 2014), Boston, MA. **Best Paper Award.**

40. Abraham, A., Dohmatob, E., Thirion B., Samaras, D. Varoquaux, G., Region segmentation for sparse decompositions: better brain parcellations from rest fMRI. In *Proceedings of the 2nd International Workshop on Sparsity Techniques in Medical Imaging (STMI) 2014* (in conjunction with MICCAI 2014), Boston, MA.

41. Yago, T., Samaras, D., Single Image Shadow Removal via Neighbor Based Region Relighting. In *Proceedings of the IEEE Color and Photometry in Computer Vision Workshop (CPCV) 2014* (in conjunction with ECCV 2014), Zurich, Switzerland.

42. Shu, Z., Yun, K., Samaras, D. Action Detection with Improved Dense Trajectories and Sliding Window. In *Proceedings ChaLearn Looking at People Workshop,* (in conjunction with ECCV 2014), Zurich, Switzerland. **3rd place in competition.**

43. Serra, M., Penacchio, O., Benavente, R., Vanrell, M., Samaras, D., The Photometry of Intrinsic Images. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2014*, Columbus, OH. (acceptance rate 30%)

44. Yu, CH., Hua, WY., Samaras, D., Zelinsky, G., Modeling Clutter Perception using Parametric Proto-object Partitioning. In *Advances in Neural Information Processing (NIPS) 26, 2013*, Lake Tahoe, NV. (acceptance rate 25%)

45. Zeng, Y., Chaohui, W., Gu, D., Samaras, D., Paragios, N., A Generic Deformation Model for Dense Non-Rigid Surface Registration: a Higher-Order MRF-based Approach. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2013*, Sydney, Australia. (acceptance rate 28%)

46. Abraham, A., Dohmatob, E.Thirion B., Samaras, D. Varoquaux, G., Extracting Brain Regions from Rest fMRI with Total-Variation Constrained Dictionary Learning. In *Proceedings of the International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) 2013*, Nagoya, Japan, Part 2, pp. 607-615. (acceptance rate 33%)

47. Gkirtzou, K., Honorio, J., Samaras, D., Goldstein, R., and Blaschko, M., fMRI Analysis with Sparse Weisfeiler-Lehman Graph Statistics. In *International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Proceedings of the Workshop on Machine Learning in Medical Imaging 2013*, Nagoya, Japan, pp. 90-97.

48. Yago-Vicente, TF., Yu, CP, Samaras, D., Single Image Shadow Detection using Multiple Cues in a Supermodular MRF. In it Proceedings of the British Machine Vision Conference (BMVC) 2013, Bristol, UK. (acceptance rate 30%)

49. Beigpour, S., Serra, M., van de Weijer, J., Benavente, R., Vanrell, M, Penacchio, O., Samaras, D., Intrinsic Image Evaluation On Synthetic Complex Scenes, In *Proceedings of the IEEE International Conference on Image Processing (ICIP) 2013*, Melbourne, Australia.

50. Yun, K, Peng, Y., Samaras, D., Zelinsky, G., Tamara, B., Studying Relationships Between Human Gaze, Description, and Computer Vision. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2013*, Portland, OR, pp. 739-746. (acceptance rate 26%)

51. Gkirtzou, K., Honorio, J., Samaras, D., Goldstein, R., and Blaschko, M., fMRI analysis of cocaine addiction using k-support sparsity. In *Proceedings of IEEE International Symposium on Biomedical Imaging (ISBI) 2013*, San Francisco, CA

52. Panagopoulos, A., Hadap, S., Samaras, D. Reconstructing Shape from Dictionaries of Shading Primitives, In *Proceedings of the Asian Conference in Computer Vision (ACCV) 2012*, Daejon, Korea, pp. (4):80-94 (acceptance rate 26%)

53. Yun, K., Honorio, J., Chattopadhyay, D., Berg, T.L., and Samaras, D. Two-person Interaction Detection Using Body-Pose Features and Multiple Instance Learning, In *Proceedings of the 2nd IEEE Workshop on Human Activity Understanding from 3D (in conjunction with CVPR 2012)*, Providence, RI.

54. Honorio, J., Samaras D., Rish, I., Cecchi, G. Variable Selection for Gaussian Graphical Models. In *Proceedings of the 15th International Conference in Artificial Intelligence and Statistics (AISTATS)*. Canary Islands, Spain. (acceptance rate 33%)

55. Wang, C., Zeng, Y., Loic, S., Kakadiaris, I., Samaras, D., Paragios, N., Viewpoint Invariant 3D Model Inference from Monocular 2D Images Using Higher-Order Priors. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2011*, Barcelona, Spain (acceptance rate 24%)

56. Panagopoulos, A., Yago, T., Samaras, D. Illumination Estimation from Shadow Borders. In *Proceedings of the IEEE Color and Photometry in Computer Vision Workshop (CPCV) 2011 (in conjunction with ICCV 2011)*, Barcelona, Spain

57. Zeng, Y. Wang, C. Wang, Y. Gu, D. Samaras D., Paragios. N., Intrinsic Dense 3D Surface Tracking. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2011*, Colorado Springs, CO. (oral presentation, acceptance rate 3.5%).

58. Panagopoulos, A.,Wang, C., Samaras, D., Paragios. N., Illumination Estimation and Cast Shadow Detection through a Higher-order Graphical Model. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2011*, Colorado Springs, CO. (acceptance rate 26%).

59. Lee, C.S., Samaras, D, Analysis and synthesis of facial expressions using decomposable nonlinear generative models, In *Proceedings of the International Workshop on Emotion Synthesis, rePresentation, and Analysis in Continuous spaces (EmoSPACE) 2011 in conjunction with IEEE International Conference on Automatic Face and Gesture Recognition and Workshops (FG)*, Santa Barbara, CA, pp. 847 - 852.

60. Zhao, X., Dellandrea, E., Chen, L., Samaras, D., AU Recognition on 3D Faces Based On An Extended Statistical Facial Feature Model, In *Proceedings of the Fourth IEEE International Conference on Biometrics Theory, Applications and Systems (BTAS) 2010*, Washington, DC.

61. Panagopoulos, A., Wang, C., Samaras, D., Paragios, N. Estimating Shadows with the Bright Channel Cue. In *Proceedings of the Workshop on Color and Reflectance in Imaging and Computer Vision (CRICV) 2010, (in conjunction with ECCV 2010)* Crete, Greece.

62. Szeptycki, P., Ardabilian, M., Chen, L., Zeng, W., Gu, X., Samaras, D., Partial Face Biometry using Shape Decomposition on 2D Conformal Maps of Faces. In *Proceeding of the 20th International Conference on Pattern Recognition (ICPR) 2010*, Istanbul, Turkey.

63. Honorio J., Samaras D., Multi-Task Learning of Gaussian Graphical Models. In *Proceedings of International Conference on Machine Learning, (ICML) 2010* Haifa,Israel (acceptance rate 26%).

64. Zeng, Y., Wang , C., Wang, Y., Gu. X. , Samaras, D., Paragios, N. Dense Non-rigid Surface Registration Using High-Order Graph Matching. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2010*, San Francisco, CA (acceptance rate 27%).

65. Szeptycki, P., Ardabilian, M., Chen, L., Zeng, W., Gu, D., Samaras, D. Conformal Mapping-based 3D Face Recognition In *Proceedings of 5th International Symposium 3D Data Processing, Visualization and Transmission (3DPVT) 2010*, Paris, France.

66. Honorio, J., Samaras, D., Goldstein, R., Simple Fully Automated Group Classification Brain fMRI. In *Proceedings of IEEE International Symposium on Biomedical Imaging (ISBI) 2010*, Rotterdam, Netherlands.

67. Honorio, J., Ortiz, L., Samaras, D., Paragios, N.,Goldstein, R., Sparse and Locally Constant Gaussian Graphical Models. In *Advances in Neural Information Processing (NIPS) 22, 2009*, Vancouver, Canada, pp. 745 - 753 (acceptance rate 24%).

68. Panagopoulos, A., Samaras, D. Paragios, N., Robust Shadow and Illumination Estimation Using a Mixture Model. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2009*, Miami, FL (acceptance rate 26%).

69. Zeng, W., Zeng, Y., Wang, Y., Gu, X, Samaras, D., 3D Non-rigid Surface Matching and Registration Based on Holomorphic Differentials. In *Proceedings of the European Conference of Computer Vision (ECCV) 2008*, Marseille, France, pp. III:1-14 (oral presentation, acceptance rate: 4.6%).

70. Langs, G., Samaras, D., Paragios, N., Honorio, J., Alia-Klein, N., Tomasi, D., Volkow, N.D., Goldstein, R.Z, Task-Specific Functional Brain Geometry from Model Maps. In *Proceedings of the International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) 2008*, New York, NY, pp: 925-933 (acceptance rate 35%).

71. Zeng, W., Gu, X., Yin, X., Zeng, Y., Lai, Y., Samaras, D. 3D Face Matching and Registration Based on Hyperbolic Ricci Flow, In *Proceedings of the Workshop on 3D Face Processing 2008, (in conjunction with CVPR)*, Anchorage, Alaska.

72. Zhang, W., Samaras, D., Zelinsky, G. J., Classifying objects based on their visual similarity to target categories. In *Proceedings of the 30th Annual Conference of the Cognitive Science Society (CogSci) 2008*, Washington, DC, pp. 1856-1861.

73. Gu, X., Wang, S., Zeng, Y., Kim, J., Wang, Y., Samaras, D. Ricci Flow for 3D Shape Analysis, In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2007* Rio de Janeiro, Brazil, (acceptance rate 23.5%).

74. Zhang, W., Samaras, D. Zelinsky, G., High Detection-rate Cascades for Real-Time Object Detection, In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2007* Rio de Janeiro, Brazil, (acceptance rate 23.5%).

75. Cheung, V., Jojic, N., Samaras, D., Capturing long-range correlations with patch models, In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2007* Minneapolis, MN, (acceptance rate 28%).

76. Wang, Y., Liu, Z., Hua, G., Wen, Z., Zhang, Z., Samaras, D., Face Re-Lighting from a Single Image under Harsh Lighting Conditions. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2007* Minneapolis, MN, (acceptance rate 28%).

77. Moreno-Noguer, F., Sanfeliu, A., Samaras, D.,A Target Dependent Colorspace for Robust Tracking. In *Proceedings of the International Conference on Pattern Recognition (ICPR) 2006*, Hong Kong, China, IV:771-774, (oral presentation, acceptance rate 14%).

78. Wang, S., Wang Y., Jin, M., Gu, X., Samaras, D., 3D Surface Matching and Recognition Using Conformal Geometry, In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2006*, New York, NY, pp. 2453-2460 (acceptance rate 28%).

79. Huang, H., Zhang, L., Samaras, D., Shen, L., Zhang, R., Makedon, F., Pearlman, J., Hemispherical Harmonic Surface Description and Applications to Medical Image Analysis. In *Proceedings of the Third International Symposium on 3D Data Processing, Visualization and Transmission (3DPVT), 2006* Chapel Hill, NC, pp 381-388 (oral presentation, acceptance rate 15%).

80. Moreno-Noguer, F., Sanfeliu, A., Samaras, D., Integration of Dependent Bayesian Filters for Robust Tracking. In *Proceedings of the IEEE International Conference on Robotics and Automation (ICRA) 2006*, Orlando, FL, pp. 4081-4087 (acceptance rate 39%).

81. Zhang, W., Samaras, D., Yang H., Zelinsky, G., A Computational Model of Eye Movements during Object Class Detection, In *Advances in Neural Information Processing (NIPS) 18, 2005*, Vancouver, Canada, pp. 1609-1616 (oral presentation, acceptance rate 3%).

82. Zelinsky, G. Zhang, W., Yu, B., Chen, X., Samaras, D., The Role of Top-down and Bottom-up Processes in Guiding Eye Movements during Visual Search. In *Advances in Neural Information Processing (NIPS) 2005*, Vancouver, Canada, pp. 1569-1576 (acceptance rate 25%).

83. Zhang, L., Samaras, D., Alia-Klein, N., Volkow, N., Goldstein, R., Modeling Neuronal Interactivity using Dynamic Bayesian Networks. In *Advances in Neural Information Processing (NIPS) 18, 2005*, Vancouver, Canada, pp. 1593-1600 (acceptance rate 25%).

84. Zhang, L., Samaras, D., Alia-Klein, N., Tomasi, D., Cottone, L., Leskovjan, A., Volkow, N., Goldstein, R., Exploiting Temporal Information in Functional Magnetic Resonance Imaging Brain Data, In *Proceedings of the International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) 2005*, Palm Springs, CA, pp. 679-687 (acceptance rate 37%).

85. Wang, Y., Gupta, M., Zhang, S., Wang, S., Gu, X., Samaras, D., Huang, P., High Resolution Tracking of Non-Rigid 3D Motion of Densely Sampled Data Using Harmonic Maps. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2005* Beijing, China, pp. 388-395 (oral presentation, acceptance rate 4%).

86. Moreno-Noguer, F., Sanfeliu, A., Samaras, D., Integration of Conditionally Dependent Object Features for Robust Figure/Background Segmentation. In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 2005* Beijing, China pp. 1713-1720 (acceptance rate 20%).

87. Wang, S., Zhang, L., Samaras, D., Face Reconstruction across Different Poses and Arbitrary Illumination Conditions. In *Proceedings of Audio- and Video-based Biometric Person Authentication Conference (AVBPA) 2005* Rye, NY, pp. 91-101. (acceptance rate 35%).

88. Zhang, W., Bin, Y., Zelinsky, G., Samaras, D., Object Class Recognition using Multiple Layer Boosting with Heterogeneous Features. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2005* San Diego, CA, pp. II:323-330 (acceptance rate 28%).

89. Zhang, L., Wang, S., Samaras, D., Face Synthesis and Recognition from a Single Image under Arbitrary Unknown Lighting using a Spherical Harmonic Basis Morphable Model. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2005* San Diego, CA, pp. II:209-216 (acceptance rate 28%).

90. Zhang, L., Samaras, D., Goldstein, R., Machine Learning for Clinical Diagnosis from Functional Magnetic Resonance Imaging. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2005* San Diego, CA, pp. I:1211-1217 (acceptance rate 28%).

91. Zhang, L., Wang, Y., Wang, S., Samaras D., Image-Driven Re-targeting and Relighting of Facial Expressions. In *Proceedings of the Computer Graphics International Conference (CGI) 2005* Stony Brook, NY, pp. 11-18 (acceptance rate 32%).

92. Moreno-Noguer, F., Sanfeliu, A., Samaras, D., Fusion of a Multiple Hypotheses Color Model and Deformable Contours for Figure Ground Segmentation in Dynamic Environments. In *Proceedings 3rd IEEE Workshop on Articulated and Non-rigid Motion (ANM) 2004*, (in conjunction with CVPR 2004), Washington, DC.

93. Huang, X., Zhang, S., Wang, Y., Metaxas, D., Samaras, D., A Hierarchical Framework for High Resolution Facial Expression Tracking. In *Proceedings 3rd IEEE Workshop on Articulated and Non-rigid Motion (ANM) 2004*, (in conjunction with CVPR 2004), Washington, DC.

94. Duan Y., Yang L., Qin H., Samaras D., Shape Reconstruction from 3D and 2D Data Using PDE-Based Deformable Surfaces. In *Proceedings of the European Conference of Computer Vision (ECCV) 2004* Prague, Czech Republic, pp. III:238-251 (acceptance rate 34%).

95. Zhang L., Samaras D., Pose Invariant Face Recognition under Arbitrary Unknown Lighting using Spherical Harmonics. In *LNCS Biometric Authentication Workshop* (in conjunction with ECCV 2004), Prague, Czech Republic, pp. 10-23.

96. Wang, Y., Samaras, D., Multiple Directional Illuminant Estimation from a Single Image. In *Proceedings of the IEEE Workshop on Color and Photometric Methods in Computer Vision (CPMCV) 2003* (in conjunction with ICCV 2003) Nice, France.

97. Zhang, L., Samaras, D., Face Recognition Under Variable Lighting using Harmonic Image Exemplars. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2003*, Madison, WI, pp. I:19-25 (oral presentation, acceptance rate 6%).

98. Lu, S., Metaxas, D., Samaras, D., Oliensis, J., Using Multiple Cues for Hand Tracking and Model Refinement. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2003* Madison, WI, pp. II:443-450 (acceptance rate 23%).

99. Lu, S., Huang, G., Samaras, D., Metaxas, D., Model-based Integration of Visual Cues for Hand Tracking. In *Proceedings of the IEEE Workshop in Motion and Video Computing (WMVC) 2002*, Orlando, FL, pp. 118-124.

100. Wang Y., Samaras D., Estimation of Multiple Directional Light Sources for Synthesis of Mixed Reality Images. In *Proceedings of Pacific Graphics 2002*, Beijing, China, pp. 38-47 (acceptance rate 24%).

101. Wang, Y., Samaras, D., Estimation of Multiple Illuminants from a Single Image of Arbitrary Known Geometry. In *Proceedings of the European Conference of Computer Vision (ECCV) 2002* Copenhagen, Denmark, pp. III:272-288 (acceptance rate 37%).

102. Samaras, D., Metaxas, D., Fua, P. and Leclerc, Y.G. Variable Albedo Surface Reconstruction from Stereo and Shape from Shading. In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 2000* Hilton Head, SC, pp. I:480-487 (acceptance rate 47%).

103. Samaras, D., Metaxas, D., Coupled Lighting Direction and Shape Estimation from Single Images, In *Proceedings of the IEEE International Conference on Computer Vision (ICCV) 1999* Corfu, Greece, pp. 868-874 (acceptance rate 31%).

104. Samaras, D., Metaxas, D., Incorporating Illumination Constraints in Deformable Models, In *Proceedings of the IEEE Computer Vision and Pattern Recognition Conference (CVPR) 1998* Santa Barbara, CA, pp. 322-329 (oral presentation, acceptance rate 9%).

Note: The top 3 computer vision conferences (ICCV, ECCV, CVPR) and the top Machine Learning conferences (NIPS, ICML) are highly competitive with low acceptance rates below 30%. Since in these conferences most papers are presented as posters and only a few as oral presentations, acceptance rates for oral presentations are well below 5%.

Conference Posters with Refereed Abstracts:

1. Umphlett, M., Nguyen, V., Gupta, R., Samaras, D., Bell, H., Saltz, J., Tsankova N., Utilizing Histology to Define a Digital Signature for Cell Infiltration in Glioblastoma. In *Journal of Neuropathology & Experimental Neurology, Volume 77, Issue 6*, for the *Abstracts of the 94th Annual Meeting American Association of Neuropathologists, 2018*.

2. Wei, Z., Adeli, H., Hoai, M., Zelinsky, G., Samaras, D., Predicting Scanpath Agreement during Scene Viewing using Deep Neural Networks. In *Journal of Vision* for the *VSS Annual Meeting Abstracts 2017*.

3. Le, H., Yu, C.-P., Samaras, D., Zelinsky, G, Object detection and localization for free from category-consistent CNN features. In *Journal of Vision* for the *VSS Annual Meeting Abstracts 2017*.

4. Zhao, T., Hou, L., Nguyen, V., Gao,Y., Samaras,D., Kurc,T., Saltz,J. Using Machine Methods to Score Tumor Infiltrating Lymphocytes in Lung Cancer In *Lung Cancer USCAP Annual Meeting 2017*.

5. Yun, K., Ge, G., Samaras, D., Zelinsky, G., How We Look Tells Us What We Do: Action Recognition Using Human Gaze. In *Journal of Vision* for the *VSS Annual Meeting Abstracts 2015*.

6. Honorio, J., Samaras, D., Rish, I., Cecchi, G. Improving Interpretability of Graphical Models in fMRI Analysis via Variable-Selection. Presented in the *Annual Meeting of the Organization for Human Brain Mapping*. Hamburg, Germany, 2014.

7. Yu, C.-P., Samaras, D., Zelinsky, G. Modeling visual clutter perception using proto-object segmentation. In *Journal of Vision* for the *VSS Annual Meeting Abstracts 2014*.

8. Yun, K., Peng, Y., Adeli, H., Berg, TL, Samaras, D., Specifying the Relationships Between Objects, Gaze, and Descriptions for Scene Understanding. In *Journal of Vision* for the *VSS Annual Meeting Abstracts 2013*.

9. Zelinsky, G., Peng, Y., Berg, AC., Samaras, D., Modeling Guidance and Recognition in Categorical Search: Bridging Human and Computer Object Detection. In *Journal of Vision* for the *VSS Annual Meeting Abstracts 2012*.

10. Zelinsky, G., Zhang, W., Samaras, D. Eye can read your mind: Decoding eye movements to reveal the targets of categorical search tasks. In *Journal of Vision* for the *VSS Annual Meeting Abstracts 2008*, Volume 8 Number 6, 380a.

11. Lee, C.S., Wang, Y., Elgammal, A., Samaras, D., Metaxas, D., Li, Z., Kanaujia, A., Gu, X., Huang, P., Subtle Facial Expression Synthesis with Motion Manifold Embedding and Nonlinear Decomposable Generative Models. Presented in the *Symposium on Computer Animation (SCA) 2006*.

12. Zhang, L., Samaras, D., Alia-Klein, N., Cottone, L., Maloney, T., Leskovjan, A.C., Tomasi, D., Fowler, J., Volkow, N.D,, Goldstein, R.Z., Using Advanced Computational Methods to Analyze Neuroimaging Data to Diagnose Psychopathology. Presented in *Society for Neuroscience, Annual Meeting*, Washington, 2005.

13. Leskovjan, A.C., Tomasi, D., Zhang, L., Cottone, L.A., Telang, F., Caparelli, E.C., Samaras, D., Chang, L., Ernst, T., Volkow, N.D., and Goldstein, R.Z., Modulation of neural response in the prefrontal cortex and cerebellum by monetary reward and instrumental response on a GO/NO-GO task. Presented in *Cognitive Neuroscience Society, Annual Meeting*, New York, NY, April, 2005. Published in *Journal of Cognitive Neuroscience, 36 Suppl*.

14. Huesman, R.H., Qi, J., Samaras, D., Wang, Y., Yang, L., Zhang, W., Ferrieri, R., Vaska, P., Schlyer, D.J., Direct List Mode Reconstruction for Motion Compensation. Presented in *the IEEE Medical Imaging Conference (MIC) 2004)*, Rome, Italy.

PhD Thesis:

Samaras, D. Integration of Illumination Constraints in Deformable Models. *PhD Thesis*, University of Pennsylvania, prepared December 2000, defended January 2001.

Artifacts:

1. SBU Individual lymphocyte classification dataset: 1785 histopathology image patches. Each patch has a binary label indicating whether the object in the center is a lymphocyte (or a plasma cell) or non-lymphocyte. 2018

2. SBU Nucleus classification dataset: Multi-label dataset of 2078 nuclei image patches, extracted from TCGA glioma pathology whole slide images. Each image patch has 15 binary labels. 2017

3. SBU Large-scale Continual Road Inspection Dataset: Approximately 700K images in 70K street segments from Google Street View for pavement condition assessment.

4. SBU Shadow Dataset: Approximately 5,000 shadow images from a wide variety of photo types together with binary shadow mask annotations. 4K images in the training set are weakly annotated semiautomatically, whereas testing images are precisely annotated manually. 2016.

5. Stony Brook University Real-world Clutter Dataset (SBU-RwC90): 90 images from the SUN09 Dataset. Object segmentations by human subjects for all 90 images are provided as part of SUN09, together with clutter rankings provided by 15 human subjects. 2013.

6. SBU Gaze-Detection-Description Dataset: Eye movements and image descriptions collected on 1,000 images from the PASCAL VOC dataset and 104 images from the SUN09 dataset. Also 20 object detectors for the PASCAL and 22 object detectors for the SUN09. 2013.

7. SBU Kinect Interaction Dataset: 8 two-person interactions collected using the Microsoft Kinect sensor: approaching, departing, pushing, kicking, punching, exchanging objects, hugging, and shaking hands from 7 participants and 21 pairs of two-actor sets. 2012.

8. Software for SPM batch analysis. Used for batch SPM preprocessing (reorientation, realignment, time slicing, normalization and smoothing) and statistical analysis (constructing design matrix and generating contrast maps) by BNL neuroscientists. 2005, 2009

9. Software for the robust and accurate tracking of facial expressions, from 3D data with submillimeter error. Used by Rutgers University. 2004

10. High accuracy multiple camera tracking system developed to track the motion of small animals for the BNL "Imaging the awake animal brain" project. The systems tracks the head of a rat with positional error less than 1mm and angular error of 0.5 degrees. 2003

Provisional Patent Application:

1. Saltz, J., Kurc, T., Hou, L., Samaras, D., Gupta, R., System and Method for Unsupervised Histopathology Image Synthesis. *Provisional Patent Application* filed on 7/23/2018. Serial number 62/701,920.

2. Saltz, J., Kurc, T., Wen, S., Hou, L., Gupta, R., Nguyen, V., Samaras, D., Batiste, R., Zhao, T., Zhu, W., System and Method for Comparison of Different Classifiers with Active Learning to Support Quality Control in Nucleus Segmentation in Pathology Images. *Provisional Patent Application* filed on 5/10/2018. Serial number 62/669,647.

3. Saltz, J., Kurc, T., Gupta, R., Zhao, T., Batiste, R., Hou, L., Nguyen, V., Samaras, D., Rao, A., Van Arnam, J., Singh, P., Lazar, A., Sharma, A., Shmulevich. I., Thorsson, V., System and Method for Computational Staining to Quantitatively Determine Tumor Infiltrating Lymphocytes from Digitized Whole Slide Pathology Images. *Provisional Patent Application* filed on 4/2/2018. Serial number 62/651,677.

4. Saltz, J., Kurc, T., Gupta, R., Zhao, T., Batiste, R., Hou, L., Nguyen, V., Samaras, D., Rao, A., Van Arnam, J., Singh, P., Lazar, A., Sharma, A., Shmulevich. I., Thorsson, V., System and Method for Computational Staining to Quantitavely Determine Tumor Infiltrating Lymphocytes from Digitized Whole Slide Pathology Images *Provisional Patent Application* filed on 11/30/2017. Serial number 62/592,931.

5. Samaras, D., Zhang, L., Wang, S., Face Synthesis and Recognition from a Single Image Under Arbitrary Unknown Lighting Using a Spherical Harmonic Basis Morphable Model. *Provisional Patent Application* filed on 6/13/2005. Serial number 60/667,551.

Honors and Awards:

2018 SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities, Stony Brook University.

2016 Dean's Millionaire's Club, College of Engineering and Applied Science, Stony Brook University.

2014	Best Paper Award: Misyrlis, M., Konova, A., Blaschko, M., Honorio, J., Alia-Klein, N., Goldstein, RZ., Samaras, D., Predicting cross-task behavioral variables from fMRI data using the k-support norm. In *Proceedings of the 2nd International Workshop on Sparsity Techniques in Medical Imaging (STMI) 2014* (in conjunction with MICCAI 2014), Boston, MA.
2014	Certificate of Appreciation (Graduate Admissions Chair), Computer Science Department, Stony Brook University.
2012 - 16	Chair, DIGITEO Institute, Paris, France.
2005	Promising Inventor Award, Research Foundation, The State University of New York.
1995 - 97	Bodosakis Foundation Scholarship, Athens Greece.
1994 - 95	Dean's Fellowship, University of Pennsylvania.
1994	Gerondelis Foundation Scholarship, Boston, MA.
1992, 88	Technical Chamber of Greece Scholarship.

Research Grants:

1. ColdSteel Inc./NSF CVDI/NY SPIR. Title:*Machine Learning and Software Development projects*
   PI: A.Kaufman. Dates: 06/2019-05/2020. Total budget **$137,999**
   Co-PI: D. Samaras. Budget Share **$69,000.**

2. Medpod Inc./NSF CVDI/NY SPIR. Title:*Machine Learning and Software Development projects*
   PI: A.Kaufman. Dates: 01/2019-12/2019. Total budget **$280,000**
   Co-PI: D. Samaras, M. Hoai. Budget Share **$93,333.**

3. Zeblok Inc/NSF CVDI/NY SPIR. Title:*Movement/mobility visual analytics from sensor data - Phase 1*.
   PI: A.Kaufman. Dates: 06/2019-12/2019. Total budget **$20,000**
   Co-PI: D. Samaras. Budget Share **$20,000.**

4. National Geographic AI for Earth Title: *Coupling AI with predictive modeling for real-time tracking of Antarctic penguin populations*
   PI: H. Lynch. Dates: 01/2019-12/2019. Total budget **$95,696**
   Co-PI: D. Samaras. Budget Share **$47,848.**

5. Stony Brook OVPR Seed Grant 2018. Title: *Predicting the attention trajectories of digital pathologists: Towards understanding the variability in cancer diagnosis*
   Total Budget **$60,000.**
   Co-PI: D. Samaras, Joel Saltz, Kenneth Shroyer. Budget Share **$15,000.** PI: Greg Zelinsky. Dates 12/2018 - 06/2020.

6. National Institutes of Child Health and Human Development NICHD 1R21 HD93912-01A1. Title: *Using adolescent nonverbal behavior to predict aggression against bullies and bystanders*
   PI: J. Jarko. Dates: 09/2018 - 08/2020. Total Budget **$428,658.**
   Co-PIs: D. Samaras, G. Zelinsky, D. Klein. Budget Share **$152,833.**

7. National Science Foundation IIS-1763981. Title: *RI: Medium: Inverse Reinforcement Learning for Human Attention Modeling*
   PI: M. Hoai. Dates: 06/2018 - 05/2022. Total Budget **$1,199,000.**
   Co-PIs: D. Samaras, G. Zelinsky. Budget Share **$399,650**

8. National Cancer Institute NCI 1UG3 CA225021. Title: *Methods and Tools for Integrating Pathomics Data into Cancer Registries*
   PI: J. Saltz. Dates: 04/18 - 03/20. Total Budget **$826,469.**
   Role: Senior Personnel. Budget Share **$82,647**.

9. National Science Foundation CNS-1718014. Title: *NeTS: Small: Improving Web User Experience Using Eye Gaze*
   PI: A. Balasubramanian. Dates: 09/17-08/20. Total Budget **$495,305.**
   Co-PIs: S. Das, D. Samaras, G. Zelinsky. Budget Share **$124,826.**

10. National Science Foundation CNS-1650499 Title: *I/UCRC: Phase II: Center for Visual and Decision Analytics*
    PI: A. Kaufman. Dates: 03/17-02/22. Total Budget **$500,000**.
    Co-PIs: D. Samaras, K Mueller, E. Zadok, A. Schwartz

11. New York State Round IV NYSUNY 2020 award for Establishing the Infrastructure, Transportation and Security Center jointly with Farmingdale State College.
    Farmingdale PI: M. Ardakani. Dates: 09/2016 - 08/2020. Total Budget **$6,600,000.**
    Stony Brook PI: D. Samaras. Budget Share **$1,500,000.**
    co-PIs: A. Kaufman, M. Hoai, A. Yazici. Equally shared.

12. Johnson & Jojnson Pharmaceutical Research. Title: *Visual features for facial cosmetic changes*
    PI: D. Samaras. Dates: 10/16 - 09/17. Total Budget **$91,000**.

13. French American Culture Exchange: Title: *Partner University Fund: 4D Vision: Computer Vision using RGB-D images and their sequences*
    Stony Brook PI: D. Samaras, Ecole Centrale Lyon PI: L Chen. Dates: 1/16-12/18. Total Budget **$150,000**
    co-PIs: D Gu, I. Kakadiaris. Stony Brook share **$59,000**.

14. Adobe Corporation Collaboration Funding.
    PI : D. Samaras. Unrestricted research support gift, Dates: 1/15 - 2/19. **$163,250**

15. National Cancer Institute NCI 1U24 CA180924 Title: *Tools to Analyze Morphology and Spatially Mapped Molecular Data*
    PI: J. Saltz. Dates: 09/2014-08/2020. Total Budget **$3,241,848**.
    Role: Senior Personnel. Budget Share **$50.000**.

16. Federal Railway Administration, FRA DTFR5315C00011. Title: *Research and Development for Feature Extraction from Digital Rail Surface Images*
    PI: KLD Labs. Dates: 05/15-02/17. Total Budget **$1,386,960**
    subcontract PI: D. Samaras. Budget Share **$209,537**

17. New York State Sensor CAT, Title: *Research and Development for Feature Extraction from Digital Rail Surface Images*
    PI: D Samaras. Dates: 07/15-09/18. Total Budget **$49,208**

18. National Institute of Drug Abuse, NIDA R21 DA034954. Title: *Machine learning discovery of patterns of self-regulation in drug addiction.*
    PI: R. Goldstein. Dates: 07/12-06/14. Total Budget: **$400,000.**
    co-PIs: N. Alia-Klein, D.Samaras. Budget share: **$131,000**.

19. National Science Foundation IIS-1161876. Title: *RI: Medium: Integrating Humans and Computers for Image and Video Understan400ding.*
    PI: T.L. Berg. Dates: 06/12-5/17. Total budget: **$1,000,000**.
    Co-PIs: D. Samaras, G. Zelinsky. Budget share: **$333,000**.

20. New York State SPIR. Title *The Face of Autism*
    PI: A. Kaufman. Dates 05/12-05/13. Budget **100.000**.
    co-PI D.Samaras. Budget share: **$50,000**.

21. DIGITEO Institute, France. SUBSAMPLE. Title: *Identification and prediction of Salient Brain StAtes through ProbabiListic structure learning*
    PI: D. Samaras. Dates: 03/12-02/2016. Total Budget: **E226,000**.

22. National Science Foundation IIS-1111047. Title *Using Gaze Cues to Build Partner Models for Collaborative Behavior*
    PI :G. Zelinsly. Dates: 9/11-8/14. Total budget: **$750,000**
    co-PIs S. Brennan, D. Samaras. Budget share: **$250,000**

23. 2011 SBU/BNL Seed Grant Program Title: *The Data Sensorium: Multi-Modal Explorations of Scientific Data*
    PI: D. Weymouth, Dates 9/11-8/12, Total budget: **$44,000**
    BNL co-PI: K. Yager, Collaborators: T. Berg, M. Schedel, K. Mueller, D. Samaras, T. Phillips, R. Goldstein, N. Alia-Klein, Z. Patterson.

24. Adobe Corporation Collaboration Funding.
    PI : D. Samaras. Unrestricted gift, 6/1/2011. **$25,000**

25. National Science Foundation CNS-0959979. Title *MRI-R2: Development of an Immersive Giga-pixel Display*
    PI: A. Kaufman. Dates 5/10-4/13, Total budget **$1,400,000**
    co-PIs: D., Samaras, K., Mueller, H, Qin, A., Varshney.

26. National Science Foundation IIS-0916286. Title *IIS: III: Small: Conformal Geometry for Computer Vision*
    PI: D. Gu. Dates 09/01/09-08/31/2010. Total budget: **$100,000**.
    co-PI: D. Samaras. Budget share: **$50,000**.

27. National Institute of Health (NIH.) Title *Conformal Geometry for Medical Imaging (R01)*
    PI: A. Kaufman. Dates 07/09-06/11. Total budget: **$1,000,000**.
    co-PIs: D. Gu, D. Samaras, W. Zhu. Budget share: **$125,000**.

28. National Science Foundation CNS-0627645 Title: *NOSS: Airborne Video Sensor Networks for Surveillance and Emergency Response.*
PI: H. Gupta. Dates: 09/07-08/10. Total budget: **$500,000**.
co-PIs: G. Nejat, D. Samaras, C.R. Ramakrishnan. Budget share: **$120,000**.

29. National Science Foundation CNS Title: *Authenticating Reality.*
PI: R. Johnson. Dates: 09/06-08/09. Total budget: **$350,000**.
co-PIs: M. Bender, D. Samaras. Budget share: **$100,000**.

30. National Institute of Drug Abuse NIDA 1 R01 DA020949-01. Title: *Machine Learning Techniques to Analyze Dynamic Functional Neuro-Imaging of the Mechanisms Underlying Inhibitory Control*.
PI: D. Samaras. Dates: 09/05-08/10. Total budget: **$1,166,605**.
co-PIs R. Goldstein, N. Alia-Klein, J. Logan, J. Fowler (Brookhaven National Labs). Budget share: **$616,752**, BNL subcontract budget: $549,853.
Note: This R01 grant was awarded through the joint NSF/NIH program Collaborative Research in Computational Neuroscience (CRCNS).

31. Source: National Science Foundation NSF IIS-0527585. Title: *HSD: Using Shared Eye-gaze to Coordinate Time-Critical Collaborative Tasks*.
PI: G. Zelinsky, Psychology, Stony Brook Univ. Dates: 9/05-8/08: Total budget **$742,000**.
co-PIs: D. Samaras, S. Brennan (Psychology). Budget Share: **$247,000**.

32. Source: National Science Foundation NSF ACI-0313184. Title: *ITR/NGS: Stochastic Multicue Tracking of Objects with Many Degrees of Freedom*.
PI: D. Metaxas, Rutgers Univ. Dates: 9/03-8/06. Total budget **$400,000**.
co-PI D. Samaras. Budget share: **$170,000**.

33. Source: Department of Justice. Title: *Facial Recognition Research Project*.
PI: P. Flynn, Univ. of Notre Dame. Dates 10/05-9/07. Total budget: **$246,661**.
co-PIs: D. Samaras, K. Bowyer (Notre Dame), JP Mellor (Rose-Hulman Institute of Technology). Budget Share: **$62,000**.

34. Source: Department of Justice. Title: *Center for Advanced Biometric Research and Evaluation*.
PI: K. Bowyer, Univ. of Notre Dame. Dates 10/03-9/05. Total budget: **$300,000**.
co-PIs: D. Samaras, P. Flynn (Notre Dame), JP Mellor (Rose-Hulman Institute of Technology). Budget Share: **$75,000**.

35. Source: National Institute of Drug Abuse, NIDA 1K23DA015517-01. Title: *Mentored Career Development Award: Behavioral correlates of fMRI response in cocaine users*.
PI: R. Goldstein, Brookhaven National Labs (BNL). Dates: 9/02-6/07. Total budget: **$732,324**.
PI on subcontract to BNL: D. Samaras. Title: *Functional Neuroimaging in drug addiction and other problem behaviors.* Dates: 9/03-8/06. Budget: **$57,378**.

36. Source: Department of Energy, DOE MO-068.
Title: *Imaging the Awake Animal Brain.*

PI: T. Ernst, Brookhaven National Labs (BNL). Dates: 6/01-05/06. Total budget: $4,500,000. One of multiple co-PIs. Budget share: **$230,000**.

Teaching:

Stony Brook Univ. Spring 2001 – 07, 2010, Fall 2012 – 2015, 2018, 2019. Graduate course in Computer Vision CSE527.
Stony Brook Univ. Fall 2000, 2007, Spring 2009, 2011, 2013, Fall 2017, 2018. Undergraduate course in Computer Vision CSE327.
Stony Brook Univ. Fall 2003, 2006, Spring 2013, 2015. Advanced graduate course in Machine Learning in Computer Vision, CSE615.
Stony Brook Univ. Fall 2005, 2006, 2009, 2010, Spring 2012, 2014, 2016. Undergraduate course in Robotics CSE378.
Stony Brook Univ. Fall 2005, 2006, 2009, 2010, Spring 2012, 2014, 2016, 2018. Graduate course in Robotics CSE525.
Stony Brook Univ. Spring 2015. Undergraduate course in Advanced Multimedia Techniques CSE/ISE364.
Stony Brook Univ. Spring 2009, Fall 2011. Undergraduate course in Technical Writing for Computer Science CSE300.
Stony Brook Univ. Spring 2006 Undergraduate Topics in Information and Technology Studies ITS102.
Stony Brook Univ. Fall 2004 Graduate course in Advanced Image Processing CSE601/ESE559 (with Gene Gindi and Jerome Liang).
Stony Brook Univ. Fall 2004 Graduate Topics in Computer Vision (with Theo Pavlides) CSE592.
Stony Brook Univ. Fall 2001 – 03. Undergraduate course Introduction to Visual Computing CSE390.
Stony Brook Univ. Fall, Spring 2001 – 19 Graduate Seminar in Computer Vision CSE656 (formerly CSE666).
UPenn 1996 – 1998. Graded graduate courses in Algorithms, Computer Architecture, Undergraduate courses in C.
UPenn 1995 – 1996. Teaching assistant for CSE110, Introduction to Programming, an introductory course in C.
Northeastern Univ. 1993 – 1994. Instructor for COM1105, Computer Science and Its Applications, an introductory computer applications course for non-CS majors.
Patras Summer 1992. Organized a two week summer course in Computer Systems for BEST, a European engineering student organization.

Lectures:

2019: Cornell Tech, Univercity College London

2017: EPFL Switzerland, Imperial College London, Vision Meets Cognition Workshop (with CVPR 2017), Skolkovo Technical University

2016: Smart Cities Workshop Stony Brook

2015: SUNY Korea, CDDA Workshop Stony Brook

2014: Digiteo Seminar Paris France, KIST Symposium Seoul.

2013: Tsinghua Sanya International Mathematics Forum 2013, Hong Kong Univ., University of Macau, CDDA Workshop at Rurgers Univ., Workshop on Dynamic Shape Capture and Analysis (4DMOD) (with ICCV 2013),

2012: First Greater New York Area Multimedia and Vision Day at Stevens Univ., Toyota Institute of Technology, CDDA Workshop at Rurgers Univ., SUNY Korea CEWIT Conference.

2011: Ecole Centrale de Lyon, Univ. Autonoma Barcelona, Workshop in Non Rigid Shape Analysis and Deformable Image Alignment (NORDIA) (with CVPR 2011), CDDA Workshop at Rurgers Univ.,

2010: Univ. Autonoma Barcelona, Ecole Centrale de Lyon, IBM Research Watson, ECCV Area Cair Meeting in Paris, Adobe Research, Univ. Politecnica Catalunya,

2009: Imperial College, London, CICESE, Ensenada.

2008: Ecole Centrale de Paris, Telecom ParisTech, Ecole Centrale de Lyon, Neurospin Laboratory, Paris, Univ. of Surrey, Toshiba Cambridge Research Lab

2007: Microsoft Research

2006: Stuyvesant High School NY, Rutgers Univ., Dahgstuhl Workshop,

2005: Univ. of Athens Greece (in greek), New York Univ., Univ. of Pennsylvania, Univ. of Washington,

2004: Univ. of Maryland, EPFL Switzerland, Eurographics 2004, Stevens Inst. of Tech.,

2003: Univ. of Notre Dame, EPFL Switzerland,

2002: Rutgers Univ., Workshop in Motion and Video Computing,

2001: Univ. of Pennsylvania, Symbol Technologies, Stony Brook Graduate Research Seminar,

2000: Univ. of Pennsylvania, San Francisco State Univ., Boston College, Drexel Univ., Stony Brook Univ.

University Service:

1. BMI Faculty Recruiting Committee 2018, 2019
2. Faculty Mentor for Minh Hoai (CS) 2015-2019
3. Faculty Mentor for Anil Yazicsi (Civil Eng) 2015-2019
4. co-Chair, Civil Engineering Chair Recruitment Committee 2018
5. co-Chair, Smart and Resilient Cities and Ecosystems Workshop, Stony Brook University, 2016.

6. Chair, CS Faculty Recruitment Committee, 2016,
7. IACS Faculty Recruitment Committee, 2016,
8. cDACT Faculty Recruitment Committee, 2014,
9. Stony Brook Graduate Council Fellowships and Awards Committee, 2014-2016
10. Chair, CS Graduate Admissions Committee, 2013,
11. CS Coordinator for High School Student Research Experience Program,
12. Advisor to CEAS Undergrad Robotics Team,
13. Volunteer Instructor for ITS 102,
14. CEWIT Building Committee,
15. CEWIT Equipment Committee,
16. CS Graduate Admissions Committee member,
17. CS Undergraduate Recruitment Committee,
18. CS Faculty Recruitment Committee,
19. Host, CS Lectures,
20. Design of Departmental Midterm Course Evaluation Form,
21. Member of Committee for Redesign of the CS PhD Qualifying System,
22. Systems Qual Coordinator, 2004,
23. Graphics Qual Examiner,
24. Reader/Member, MS, Preliminary and Ph.D. Committees of more than 50 students.

Community Service:

High School Senior Science Projects (12):
Dan Lopuch (Summer 2003, admitted to MIT),
Shira Mitchell (Simons Fellow, Lucent Fellow, Summer 2004, admitted to Harvard),
Andrew Hsiao (Simons Fellow, Summer 2005).
Perry Stein (Simons Fellow, Summer 2007, admitted to Harvey Mudd College),
Rashmi Rao (Summer 2009, Intel Science Comp. Semifinalist, admitted to Barnard College),
Jared Weiss (Summer 2012, Intel Science Comp. Semifinalist, admitted to Columbia Univ.)
Gary Ge (Summer 2014, Siemens Science Comp. Semifinalist, admitted to Stanford Univ.)
Kunal Singh (Simons Fellow, Summer 2015, Siemens Science Comp. Regional finalist, admitted to UC Berkley)
Nicholas Cimaszewski (Simons Fellow, Summer 2016)

Veda Murthy (Simons Fellow, Summer 2016, Siemens Science Comp. Regional finalist, admitted to Univ. of Southern California)
Ayush Agarwal (Simons Fellow, Summer 2017, admitted to Stanford Univ.)
Peter Li (Simons Fellow, Summer 2018)

Professional Activities:

- Program Chair *IEEE Conference in Computer Vision and Pattern Recognition (CVPR), 2022*.
- Associate Editor *Computer Vision and Image Understanding, (CVIU), 2013 -*
- Area Chair *IEEE Conference in Computer Vision and Pattern Recognition (CVPR), 2018, 2019, 2020.*
- Area Chair, *IEEE International Conference in Computer Vision (ICCV) 2007, 2019*.
- Area Chair *European Conference in Computer Vision (ECCV) 2010, 2018*.
- Area Chair *AAAI Conference on Artificial Intelligence (AAAI) 2020*.
- Area Chair *British Machine Vision Conference (BMVC) 2019*.
- Area Chair *International Conference on Pattern Recognition (ICPR) 2014, 2016*.
- Associate Editor *Image and Vision Computing (IVC) 2009-2011*.
- Chair *Workshop on 3D Face Processing, 2008*.
- Program Chair, *Computer Graphics International (CGI) 2005*.
- Org. Committee Member, *International Workshop on Volume Graphics, 2001*.
- Program Committee Member,
  Computer Vision and Pattern Recognition (CVPR) 2006, 2007, 2009, 2011-17
  International Conference in Computer Vision (ICCV) 2009, 2013, 2015, 2017
  European Conference in Computer Vision (ECCV) 2008, 2012 - 16
  International Conference in Machine Learning (ICML) 2016, 2018, 2019
  Neural Information Systems (NIPS) 2010, 2012, 2016, 2018
  Asian Conference in Computer Vision (ACCV) 2016
  British Machine Vision Conference (BMVC) 2017
  Face and Gesture (FG) 2011, 2013, 2017, 2018
  CVPR, ICCV ChaLearn Workshops 2015
  FG Workshop on 3D Face Biometrics 2013
  Workshop in Color and Photometry (CPCV) 2011
  Symposium on Computer Animation (SCA) 2007
  Computer Graphics International (CGI) 2006,
  International Symposium on Visual Computing 2006 (ISVC06),
  Video Processing for Security 2006,
  Brazilian Symposium on Computer Graphics and Image Processing, 2006, 2007

Pacific Graphics 2005, 2007
IEEE Workshop on Human Motion (HM) 2007
IEEE Workshop on Beyond Multiview Geometry (BMGCVPR) 2007
IEEE Workshop on Variational, Geometric and Level Set Methods in Computer Vision 2005,
3D Data Processing, Visualization, and Transmission (3D-PVT) 2004, 2006,
IEEE Workshop on Articulated Non-rigid Motion 2004,
Computer Animation and Social Agents, (CASA) 2003,
IEEE Workshop on Motion and Video Computing (WMVC) 2002,
Volume Graphics 2001,
Web3D Symposium 2001.

- Additional Reviewer, *Computer Vision and Pattern Recognition Conference 1998, 2000*.

- Journal Reviewer,
IEEE Transactions Pattern Analysis and Machine Intelligence,
International Journal of Computer Vision,
NeuroImage,
IEEE Transactions on Image Processing,
IEEE Transactions on Medical Imaging,
IEEE Transactions on Neural Systems and Rehabilitation Engineering,
IEEE Transactions on Visualization and Graphics,
IEEE Systems, Man and Cybernetics - Part B,
IEEE Transactions on Neural Networks,
Computer Vision and Image Understanding,
Image and Vision Computing,
Graphical Models and Image Processing,
Pattern Recognition Letters,
Visual Computer.

- External Evaluator, Hellenic Quality Assurance Agency of Higher Education, 2011, 2013

- Reviewer, National Science Foundation, National Institutes of Health, Israeli Science Foundation.

- Founding member and secretary of the local branch of BEST, a European engineering student organization in the Univ. of Patras, Greece. 1990 – 1993.

Memberships:

IEEE, ACM, OHBM, MICCAI, Eurographics.

Graduate Students:

Current PhD students (17):
Zhixin Shu (exp. grad. 2019)
Le Hou (exp. grad. 2019)
Zijun Wei (exp. grad. 2019)

Ke Ma (exp. grad. 2020)
Hieu Le, (exp. grad. 2020)
Huidong Liu (exp. grad. 2021)
Vu Nguyen (exp. grad. 2021)
Maozheng Zhao (exp. grad. 2022)
Sagnik Das (exp. grad 2022)
Shahira Abousamra (exp. grad 2022)
Han Le (exp. grad 2023)
Zhibo Yang (exp grad (2023)
Shahrukh Athar (exp. grad 2024)
Prantik Howlander (exp. grad 2024)
David Paredes (exp. grad 2024)
Sourtadeep Chakraborty (exp. grad 2024)
Jingwei Zhang (exp. grad 2024)

Graduated PhD students (8):
Tomas Yago-Vicente, 12/2018. Thesis title: *Large-scale weakly supervised shadow detection* (so-advised with Minh Hoai)
Chen-Ping Yu, 7/2016. Thesis title: *Modeling Human Visual Perception using Computer Vision and Machine Learning* (co-advised with Greg Zelinsky)
Jean Honorio, 8/2012. Thesis title: *Tractable Learning of Graphical Model Structures from Data* (co-advised with Luis Ortiz))
Yun Zeng, 6/2012. Thesis title: *Coupling Techniques for Dense Surface Registration: A Continuous-Discrete Approach* (co-advised with David Gu)
Alexandros Panagopoulos, 12/2011. Thesis Title: *Illumination and Geometry Inference Using Graphical Models*
Wei Zhang, 5/2008. Thesis title: *Feature Representation for Generic Object Detection and Recognition: Computer Vision and Human Vision* (co-advised with Greg Zelinsky)
Yang Wang, 9/2006. Thesis title: *Facial Modeling on High Resolution Geometry and Appearance Data*
Lei Zhang, 8/2006. Thesis title: *Machine Learning for Clinical Diagnosis from Functional Magnetic Resonance Imaging*

Hosted PhD students (8):
Dimitri Gominski (France), D. Khue Le-Huu (France), Mengjiao Wang (United Kingdom), Alexandre Abraham (France), Marc Serra-Vidal (Spain), Chaohui Wang (France), Przemyslaw Szeptycki (France), Francesc Moreno-Noguer, (Spain).

Current MS students (2):
Eugenia Soroka (exp. grad. 2019)
Vamsikrishna Kodumuru Meesala (exp. grad. 2019)

Graduated MS students (29):
2016-2019 (8): Shree Nath Dutt Sharma, Bhushan Sonawane, Naveen Gaddam, Shivang Gupta,

Pratyoy Mukhopadhyay, Shrinand Thakkar, Kiwon Yun, Jesse Brizzi,
2011-2015 (9): Kwangsuk Park, Michail Misyrlis, Hojin Choi, Vitaly Sergeyev, Hong-Jin Lee, Joydeep Sinha, Yifan Peng, Carlos Orrego, Juntian Shan,
2006-2010 (4): Andrei Todor, Tom Swedlund, Tejo Chalasani, Lei Zhang,
2001-2005 (8): Hyung-Yeon Gu, Mohit Gupta, Bing Yu, Liu Yang, Dhaval Dalal, Kefei Lu, Jian Zhong, Zhongbin Zhu.