Georgia Gkioxari

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Work Experience

Computing + Mathematical Sciences (CMS), Caltech 01/2023 – now
Assistant Professor

Meta, Facebook AI Research 01/2018 – 12/2022
Research Scientist

Meta, Facebook AI Research 09/2016 – 01/2018
Post-doctoral Researcher

Google AI, Machine Perception 08/2015 – 05/2016
Research Intern with Rahul Sukthankar, Jitendra Malik

Google Brain 05/2015 – 08/2015
Research Intern with Navdeep Jaitly

INRIA Grenoble-Rhone Alpes, LEAR 06/2013 – 08/2013
Visiting Researcher with Cordelia Schmid

UC Berkeley, Computer Vision Group 08/2010 – 09/2016
Graduate Student Researcher with Jitendra Malik

NTUA, Computer Vision Group 09/2009 – 07/2010
Undergraduate Member with Petros Maragos

Education

University of California, Berkeley 2010 – 2016
Ph.D. in Electrical Engineering and Computer Science
Thesis: "Contextual visual recognition from images and videos"
Advisor: Prof. Jitendra Malik

National Technical University of Athens 2005 – 2010
Diploma in Electrical and Computer Engineering (5-year degree)
Major: Signals, Systems and Robotics
Thesis: "3D Reconstruction of Objects and Buildings with Multiple View Geometry"
G.P.A.: Overall: 9.78/10 (Major: 9.96/10) – ranked 2nd
Advisor: Prof. Petros Maragos

Teaching Experience

EE/CS 148 – Large Language And Vision Models 2023
Caltech, Spring 2023

AIMS, AMMI 2019 – 2022
Object Recognition, 3D Computer Vision

ICVSS, Italy — Summer, 2018
Object Recognition

CS280: Computer Vision, UC Berkeley — Spring, 2012
Human visual perception, stereo, image segmentation, texture, object recognition

CS188: Introduction to Artificial Intelligence, UC Berkeley — Fall, 2011
Search, Markov decision processes, reinforcement learning, Bayes nets, probabilistic tracking, Pac-Man
Graduate Student Instructor Outstanding Award

Open Source Libraries

PyTorch3D — 2020
Nikhila Ravi, Jeremy Reizenstein, David Novotny, Taylor Gordon, Wan-Yen Lo, Justin Johnson and Georgia Gkioxari

Detectron — 2017
Ross Girshick, Ilija Radosavovic, Georgia Gkioxari, Piotr Dollàr and Kaiming He
PAMI Mark Everingham Prize

Honors/Awards/Nominations

- PAMI Young Researcher Award — 2021
  Awarded annually to one or two researchers for distinguished research contribution in computer vision within seven years of their PhD.
- PAMI Mark Everingham Prize for Detectron — 2021
  Awarded to a researcher, or a team of researchers, who have made a selfless contribution of significant benefit to other members of the computer vision community. This prize was awarded to the Detectron team for our object detection library suite Detectron.
- Nomination for Women in AI Awards, VentureBeat — 2020
- 30 Influential Women Advancing AI in 2019, ReWork — 2019
- Marr Prize for Mask R-CNN, ICCV — 2017
  The ICCV best paper award is the Marr Prize, named after British neuroscientist David Marr. The award is picked by a committee delegated by the program chairs of the conference.
- CVPR Outstanding Reviewer, CVPR — 2017
- Rising Stars in EECS — 2014
- Graduate Student Instructor Outstanding Award for CS188 — 2012
- State Scholarship Foundation Award for excellent academic performance — 2009 – 2010
- Thomaidio Award for excellent academic performance — 2009 – 2010
- KARY Award for excellent academic performance — 2009 – 2010
- Thomaidio Award for excellent academic performance — 2008 – 2009
- KARY Award for excellent academic performance — 2008 – 2009
- State Scholarship Foundation Award for excellent academic performance — 2006 – 2007
- Chr. Papakyriakopoulos Award for excellent performance in mathematics — 2006 – 2007

- KARY Award for excellent academic performance 2006 – 2007
- Chr. Papakyriakopoulos Award for excellent performance in mathematics 2005 – 2006
- Nikolaos Kritikos Award for excellent performance in mathematics 2005 – 2006
- Eurobank EFG Award for achieving the highest GPA score in my highschool 2005

Service

- Senior Area Chair for NeurIPS 2023 2023
- Senior Area Chair for CVPR 2023 2023
- Award Committee for WACV 2023 2023
- DEI chair for WACV 2022 2022
- Program co-Chair for CVPR 2021 2021
- Area Chair for CVPR 2018, 2019, 2020, 2022, ICCV 2023, ECCV 2022 2018 – 2023
- Program Committee for CVPR, ECCV, ICCV, ICML, NeurIPS 2012– 2023

Talks

- Talk at the “Scholars & Big Models: How can Academics Adapt?" Workshop, CVPR 2023 06/2023
- Keynote at the “3D Scene Understanding" Workshop, CVPR 2023 06/2023
- Keynote at the “Compositional 3D Vision" Workshop, CVPR 2023 06/2023
- Keynote at the “Multi-Agent Behavior" Workshop, CVPR 2023 06/2023
- Keynote at the ScanNet Workshop, CVPR 2023 06/2023
- Keynote at the “Fine-grained Visual Categorization" Workshop, CVPR 2023 06/2023
- Keynote at the “3D Vision & Robotics" Workshop, CVPR 2023 06/2023
- Keynote at the“Learning 3D with Multi-View Supervision" Workshop, CVPR 2023 06/2023
- Invited talk at Google Research, virtual 05/2023
- Guest Lecture at Imagine Lab, virtual 11/2022
- Guest Lecture at CMU-RI, virtual 10/2022
- Guest Lecture at Stanford Vision & Learning Lab, virtual 09/2022
- AI Symposium, Milan, Italy 07/2022
- Distinguished Lecture Series, Imperial College London 12/2021
- Panelist at the “Industry and Computer Vision Panel” , ICCV 2021 10/2021
- Speaker at “Reviewing the Review Process” tutorial, ICCV 2021 10/2021
- Keynote Speaker at “Workshop on Distributed Smart Cameras”, ICCV 2021 10/2021
- Keynote Speaker at “Holistic Video Understanding” workshop, ICCV 2021 10/2021
- Keynote Speaker at “Computer Vision in Human-Robot Collaborative Factories of the Future” workshop, ICCV 2021 10/2021
- Keynote Speaker at “Assistive Computer Vision and Robotics ” workshop, ICCV 2021 10/2021
- Featured in “Humans of AI: Stories, not Stats” 09/2021
- Invited Speaker at MIA, MIT 09/2021
- Invited Speaker at UIUC’s computer vision lab, UIUC 05/2021
- Invited Speaker at Princeton’s computer vision lab, Princeton 04/2021

- Invited Speaker at ECE's seminar series, CMU 04/2021
- Lecturer for SIGGRAPH Asia Course on PyTorch3D 12/2020
- Keynote Speaker at "Differentiable CV, graphics, and physics in ML " workshop, NeurIPS 12/2020
- Invited Speaker at 3DGV Seminar 10/2020
- Featured in TWiML podcast 09/2020
- Invited Speaker at the Center for Research and Formation in AI, University de los Andes 09/2020
- Keynote Speaker at "Learning 3D Generative Models" workshop, CVPR 2020 06/2020
- Keynote Speaker at "Women in Computer Vision" workshop, CVPR 2020 06/2020
- Keynote Speaker at "Geometry Meets Deep Learning" workshop, ICCV 2019 10/2019
- Keynote Speaker at "Person in Context" workshop, ICCV 2019 10/2019
- Invited Speaker at "Scenes from Video" workshop, Spain 09/2019
- Keynote Speaker at "Benchmarking Multi-Target Tracking: How crowded can it get?" workshop, CVPR 2019 06/2019
- Keynote Speaker at "Deep Learning for Visual Navigation" workshop, CVPR 2019 06/2019
- Invited Speaker at "GRASP Lab Seminar", UPenn 04/2019
- Invited Speaker at "Deep Learning for Robotics Summit", ReWork 07/2018
- Invited Speaker at "Good Citizen" workshop, CVPR 2018 06/2018
- Speaker at " Visual Recognition and Beyond" tutorial, CVPR 2018 06/2018
- Speaker at " Instance-level Visual Recognition" tutorial, ICCV 2017 09/2017

Tutorial/Workshop Organization

- Tutorial on "Visual Recognition for Images, Video, and 3D", ICCV 2019 2019
- Tutorial on "Visual Recognition and Beyond", CVPR 2019 2019
- Tutorial on "Visual Recognition and Beyond'', ECCV 2018 2018
- Tutorial on "Visual Recognition and Beyond'', CVPR 2018 2018
- Tutorial on "Instance-level Visual Recognition", ICCV 2017 2017

Publications

Omni3D: A Large Benchmark and Model for 3D Object Detection in the Wild
Garrick Brazil, Abhinav Kumar, Julian Straub, Nikhila Ravi, Justin Johnson and Georgia Gkioxari
Computer Vision and Pattern Recognition CVPR, 2023

Multiview Compressive Coding for 3D Reconstruction
Chao-Yuan Wu, Justin Johnson, Jitendra Malik, Christoph Feichtenhofer and Georgia Gkioxari
Computer Vision and Pattern Recognition CVPR, 2023

BKinD-3D: Self-Supervised 3D Keypoint Discovery from Multi-View Videos
Jennifer J. Sun, Lili Karashchuk, Amil Dravid, Serim Ryou, Sonia Fereidooni, John Tuthill, Aggelos Katsaggelos, Bingni Brunton, Georgia Gkioxari, Ann Kennedy, Yisong Yue and Pietro Peronan
Computer Vision and Pattern Recognition CVPR, 2023

Learning 3D Object Shape and Layout without 3D Supervision
Georgia Gkioxari, Nikhila Ravi and Justin Johnson
Computer Vision and Pattern Recognition CVPR, 2022

Differentiable Stereopsis: Meshes from Multiple Views Using Differentiable Rendering
Shubham Goel, Georgia Gkioxari and Jitendra Malik
Computer Vision and Pattern Recognition CVPR, 2022

3D Shape Reconstruction from Vision and Touch
Edward J. Smith, Roberto Calandra, Adriana Romero, Georgia Gkioxari, David Meger, Jitendra Malik and Michal Drozdal
Conference on Neural Information Processing Systems NeurIPS, 2020

SynSin: End-to-end View Synthesis from a Single Image
Olivia Wiles, Georgia Gkioxari, Rick Szeliski and Justin Johnson
Computer Vision and Pattern Recognition CVPR, 2020

Mesh R-CNN
Georgia Gkioxari, Jitendra Malik and Justin Johnson
International Conference of Computer Vision ICCV, 2019

Embodied Question Answering in Photorealistic Environments with Point Cloud Perception
Erik Wijmans, Samyak Datta, Oleksandr Maksymets, Abhishek Das, Georgia Gkioxari, Stefan Lee, Irfan Essa, Devi Parikh and Dhruv Batra
Computer Vision and Pattern Recognition CVPR, 2019

Multi-Target Embodied Question Answering
Licheng Yu, Xinlei Chen, Georgia Gkioxari, Mohit Bansal, Tamara Berg and Dhruv Batra
Computer Vision and Pattern Recognition CVPR, 2019

Neural Modular Control for Embodied Question Answering
Abhishek Das, Georgia Gkioxari, Stefan Lee, Devi Parikh and Dhruv Batra
Conference on Robot Learning CoRL, 2018

Detecting and Recognizing Human-Object Interactions
Georgia Gkioxari, Ross Girshick, Piotr Dollàr and Kaiming He
Computer Vision and Pattern Recognition CVPR, 2018

Embodied Question Answering
Abhishek Das, Samyak Datta, Georgia Gkioxari, Stefan Lee, Devi Parikh and Dhruv Batra
Computer Vision and Pattern Recognition CVPR, 2018

Detect-and-Track: Efficient Pose Estimation in Videos
Rohit Girdhar, Georgia Gkioxari, Lorenzo Torresani, Manohar Paluri and Du Tran
Computer Vision and Pattern Recognition CVPR, 2018

Data Distillation: Towards Omni-Supervised Learning
Ilija Radosavovic, Piotr Dollàr, Ross Girshick, Georgia Gkioxari and Kaiming He
Computer Vision and Pattern Recognition CVPR, 2018

Building Generalizable Agents With a Realistic And Rich 3D Environment
Yi Wu, Yuxin Wu, Georgia Gkioxari and Yuandong Tian
International Conference on Learning Representations – Workshop Track ICLR W, 2018

Mask R-CNN
Kaiming He, Georgia Gkioxari, Piotr Dollàr and Ross Girshick
International Conference of Computer Vision ICCV, 2017
Best Paper Award (Marr Prize)

Learn2Smile: Learning Non-verbal Interaction through Observation
Will Feng, Anitha Kannan, Georgia Gkioxari and Larry Zitnick
International Conference on Intelligent Robots and Systems IROS, 2017
Finalist for the JTCF Novel Technology Paper Award For Amusement Culture

Chained Predictions using Convolutional Neural Networks
Georgia Gkioxari, Alexander Toshev and Navdeep Jaitly
European Conference of Computer Vision ECCV, 2016

The Three R's of Computer Vision: Recognition, Reconstruction and Reorganization
J. Malik, P. Arbelàez, J. Carreira, K. Fragkiadaki, R. Girshick, G. Gkioxari, S. Gupta, B. Hariharan, A. Kar, S. Tulsiani
Pattern Recognition Letters 2016

Contextual Action Recognition with R*CNN
Georgia Gkioxari, Ross Girshick and Jitendra Malik
International Conference of Computer Vision ICCV, 2015

Actions and Attributes from Wholes and Parts
Georgia Gkioxari, Ross Girshick and Jitendra Malik
International Conference of Computer Vision ICCV, 2015

Finding Action Tubes
Georgia Gkioxari and Jitendra Malik
Computer Vision and Pattern Recognition CVPR, 2015

Using *k*-poselets for detecting people and localizing their keypoints
Georgia Gkioxari*, Bharath Hariharan*, Ross Girshick and Jitendra Malik
Computer Vision and Pattern Recognition CVPR, 2014
* authors contributed equally

Articulated Pose Estimation using Discriminative Armlet Classifiers
Georgia Gkioxari, Pablo Arbelaez, Lubomir Bourdev and Jitendra Malik
Computer Vision and Pattern Recognition CVPR, 2013

Relevant Coursework

Artificial Intelligence: Computer Vision, Statistical Learning Theory A, Natural Language Processing, Neural Computation

Theory: Introduction to Convex Optimization, Randomized Computation

Neuroscience: Visual Neuroscience

Computer Skills

Deep Learning Libraries: PyTorch, TensorFlow, Caffe2, Caffe

Programming Languages: Python, C/C++, CUDA, Java

Language Skills

Greek: native

English: Certificate of Proficiency in English, University of Michigan

German: Mittelstufe, Goethe Institut

French: Three years of studies

Last updated: July 3, 2023