AUSTIN MYERS

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EXPERIENCE

Google DeepMind *May 2024 - Present*
Research Engineer San Francisco, CA

· Developed multimodal video-language models for fundamental research and applications to video description and video generation in Google products.

Google Research *Jan. 2019 - May 2024*
Research Engineer San Francisco, CA

· Developed multimodal video-language models for fundamental research and applications to video description and action detection in Google products.

Waymo *Dec. 2016 - Jan. 2019*
Software Engineer Mountain View, CA

· Developed segmentation, object detection, and tracking algorithms to improve self driving car perception capabilities.

Google Research, Machine Intelligence *Jun. 2015 - Aug. 2015*
Ph.D. Software Engineering Intern Mountain View, CA
Advisor: Kevin Murphy

· Developed semantic segmentation and object detection algorithms to predict nutritional content of food in images.

Center for Automation Research, UMIACS[1] *Jan. 2012 - Dec. 2016*
Graduate Research Assistant College Park, MD
Advisor: Dr. Yiannis Aloimonos
Co-Advisor: Dr. Cornelia Fermuller

· Developed methods to identify the functionality of object parts in RGB-D data using deep learning and segmentation algorithms.

Goddard Space Flight Center, NASA[2] *Jun. 2011 - Aug. 2011*
Research Intern Greenbelt, MD

· Advised an undergraduate intern team on a project to allow groups of interplanetary robots to map terrain using simultaneous localization and mapping (SLAM).

Center for Automation Research, UMIACS[1] *Jun. 2010 - Jan. 2011*
Graduate Research Assistant College Park, MD
Advisor: Dr. Hanan Samet

· Developed a system and algorithms to detect image duplicates among large-scale image data dynamically collected from social media and Internet news sources.

EDUCATION

University of Maryland, College Park *2016*
Ph.D. in Computer Science

University of Maryland, College Park *2010*
B.S. in Computer Engineering

[1] University of Maryland Institute for Advanced Computer Studies
[2] National Aeronautics and Space Administration

PUBLICATIONS

Xingyi Zhou, Anurag Arnab, Shyamal Buch, Shen Yan, **Austin Myers**, Xuehan Xiong, Arsha Nagrani, and Cordelia Schmid. *Streaming Dense Video Captioning.* IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

David Chan, Yiming Ni, Sudheendra Vijayanarasimhan, David Ross, **Austin Myers**, and John Canny. *Distribution aware metrics for conditional natural language generation.* International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING), 2024.

David Chan, **Austin Myers**, Sudheendra Vijayanarasimhan, David Ross, and John Canny. *IC^3 Image Captioning by Committee Consensus.* Empirical Methods in Natural Language Processing (EMNLP), 2023.

David Chan, **Austin Myers**, Sudheendra Vijayanarasimhan, David Ross, Bryan Seybold, and John Canny. *What's in a Caption? Dataset-Specific Linguistic Diversity and Its Effect on Visual Description Models and Metrics.* Workshop on Vision Datasets Understanding: Conference on Computer Vision and Pattern Recognition Workshop (CVPR), 2022.

Chen Sun, **Austin Myers**, Carl Vondrick, Kevin Murphy, and Cordelia Schmid. *Videobert: A joint model for video and language representation learning.* International Conference on Computer Vision (ICCV), 2019.

Austin Myers, Nick Johnston, Vivek Rathod, Anoop Korattikara, Alex Gorban, Nathan Silberman, Sergio Guadarrama, George Papandreou, Jonathan Huang, and Kevin Murphy. *Im2Calories: Towards an Automated Mobile Vision Food Diary.* International Conference on Computer Vision (ICCV), 2015.

Austin Myers, Ching L. Teo, Cornelia Fermüller, and Yiannis Aloimonos. *Affordance detection of tool parts from geometric features.* International Conference on Robotics and Automation (ICRA), 2015.

Austin Myers, Angjoo Kanazawa, Cornelia Fermüller, and Yiannis Aloimonos. *Affordance of object parts from geometric features.* RGB-D: Advanced Reasoning with Depth Cameras Workshop: Robotics Science and Systems (RSS), 2014.

Austin Myers, Angjoo Kanazawa, Cornelia Fermüller, and Yiannis Aloimonos. *Affordance of object parts from geometric features.* Vision Meets Cognition Workshop: Computer Vision and Pattern Recognition (CVPR), 2014.

Ching L. Teo, **Austin Myers**, Cornelia Fermüller, and Yiannis Aloimonos. *Embedding high-level information into low level vision: Efficient object search in clutter.* International Conference on Robotics and Automation (ICRA), 2013.

TEACHING

CMSC733: Computer Processing of Pictorial Information.	*Fall 2012*
CMSC412: Operating Systems.	*Fall 2011*
CMSC216: Introduction to Computer Systems.	*Fall 2011*
CMSC122: Introduction to Computer Programming via the Web.	*Spring 2011*

AWARDS

University of Maryland Deans List	*Fall 2006, Spring 2008 - Spring 2010*
UMCP Presidents Scholarship Award	*Fall 2006 - Spring 2010*
A. James Clark School of Engineering Scholars Award	*Fall 2006 - Spring 2010*
Maryland Distinguished Scholar Award	*Fall 2006 - Spring 2010*

TECHNICAL SKILLS

Languages (Proficient): Python, C, C++
Languages (Experienced): Java, C#, MATLAB, CUDA
Libraries and Tools: TensorFlow, NumPy, ROS, LaTeX, Emacs, bash, Linux.