

# Shan Yang

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## EXPERIENCE

**Amazon/A9**, Palo Alto — Senior Applied Scientist | Sept 2021 - present

Led Amazon product search multi-modal personalization \* Led and launched Amazon Video Search on Amazon product search page \* Led Multi-modal LLM research \* Led full-stack development \* Amazon Patent

**Google Research**, Mountain View — Senior Software Engineer | Jun 2017 - Sept 2021

Multimodal Video Content Creation \* Research direction initiation \* Led cross-team collaboration \* Host two research interns \* Research [Publication](#)

3D Vision Research: Monocular Video Pose Understanding \* Owner and major contributor of the 2D/3D Reconstruction ML Model Development \* Created end-to-end monocular video analyzer for biological research \* Google Patent

**Google Research**, Mountain View — Research Intern | Summer 2016 (3 months)

3D Vision Research: Monocular Video 3D Human Pose Understanding \* 3D Hair Reconstruction

**Samsung Research America**, San Jose — Software Engineer Intern | Summer 2014 (3 months) and Summer 2013 (3 months)

Advanced Processor Lab \* Graphics hardware test infrastructure development

## EDUCATION

**University of North Carolina at Chapel Hill**, NC — Ph.D. Computer Science | 2012 - 2017

**Shanghai Jiao Tong University**, China — B.E. Software Engineering | 2008 - 2012

## PUBLICATIONS

ViLA: Efficient video-language alignment for video question answering

Xijun Wang, Junbang Liang, Chun-Kai Wang, Kenan Deng, Yu Lou, Ming C Lin, Shan Yang, European Conference on Computer Vision (ECCV), 2024

ICAR: Image-based Complementary Auto Reasoning

Xijun Wang, Anqi Liang, Junbang Liang, Ming Lin, Yu Lou, Shan Yang, AAAI 2023

MeSa: Masked, Geometric, and Supervised Pre-training for Monocular Depth Estimation

Muhammad Osama Khan, Junbang Liang, Chun-Kai Wang, Shan Yang, Yu Lou, NeurIPS 2023 Workshop SSLTheoryPractice

Attention Bottlenecks for Multimodal Fusion

Arsha Nagrani, **Shan Yang**, Anurag Arnab, Aren Jansen, Cordelia Schmid, Chen Sun, Neural Information Processing Systems (NIPS), 2021

Optical Mouse: 3D Mouse Pose From Single-view Video

**Shan Yang\***, Bo Hu\*, David A. Ross, Avneesh Sud, Yi Liu, Graham Ruby, Bryan Seybold, Conference on Computer Vision and Pattern Recognition (CVPR), 2021 CV4Animal Workshop

Learn to Dance with AIST++: Music Conditioned 3D Dance Generation

**Shan Yang\***, Ruilong Li\*, David A. Ross, Angjoo Kanazawa, International Conference on Computer Vision (ICCV), 2021

Physics-Inspired Garment Recovery from a Single-View Image

**Shan Yang**, Zherong Pan, Tanya Amert, Ke Wang, Licheng Yu, Tamara Berg, Ming C. Lin, ACM Transaction on Graphics (TOG), 2018

Learning-based Cloth Material Recovery from Video

**Shan Yang**, Junbang Liang, Ming C. Lin, International Conference on Computer Vision (ICCV), 2017

Modeling Context in Referring Expressions

Licheng Yu, Patric Poirson, **Shan Yang**, Alex Berg, Tamara Berg, European Conference on Computer Vision (ECCV), spotlight, 2016

Classification of Prostate Cancer Grades and T-Stages based on Tissue Elasticity Using Medical Image Analysis

**Shan Yang**, Vladimir Jojic, Jun Lian, Ronald Chen, Hongtu Zhu and Ming C. Lin, International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2016

Bayesian Estimation of Non-Rigid Mechanical Parameters Using Temporal Sequences of Deformation Samples

**Shan Yang**, Ming C. Lin, IEEE International Conference on Robotics and Automation (ICRA), 2016

Material Cloning: Acquiring Elasticity Parameters from Images

**Shan Yang**, Ming C. Lin, IEEE Transactions on Visualization and Graphics (TVCG), 2016

Simultaneous Estimation of Elasticity for Multiple Deformable Bodies

**Shan Yang**, Ming C. Lin, Journal Computer Animation and Virtual Worlds (CAVW), 2015

## **PATENT**

US10546433B2

GP-300253-00-PR in Google