

# Shan Yang

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Senior Applied Machine Learning Software Engineer with 4 years of experience, led machine learning research, contributed to multiple million-line code bases and published research papers. Seeking for the next big impactful project to devote myself in and further improve both my technical and leadership skills.

## EXPERIENCE

**Amazon/A9**, Palo Alto — Senior Applied Scientist | Sept 2021 - present  
Visual Search and AR Research and Applications

**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 Haire 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

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