

William Bokui Shen

b0ku1.github.io

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EDUCATION

Stanford University

Ph.D. in Computer Science

Specialization: Computer Vision

Stanford, CA

2018-Now

GPA:-

Stanford University

Bachelor of Science in Computer Science with Honor

Track: Artificial Intelligence

Stanford, CA

2014-2018

GPA:4.0/4.0

ACADEMIC HONORS

- **IEEE-CVPR 2018 Best Paper Award:** *Taskonomy: Disentangling Task Transfer Learning*
- **Frederick Emmons Terman Engineering Scholastic Award:** awarded to top 5% of entire engineering graduating class, GPA based
- **Stanford University Computer Science Department Honor:** advised by Prof. Silvio Savarese.
- **Stanford University Distinction**
- **Stanford CS106A Graphics Contest Champion:** top 2 out of class of 600+ students
- **Stanford Tau Beta Pi Engineering Society**

PUBLICATIONS:

- **Taskonomy: Disentangling Task Transfer Learning** Amir R. Zamir, Alexander Sax*, **William B. Shen***, Leo Guibas, Jitendra Malik, Silvio Savarese
-IEEE Conference on Computer Vision and Pattern Recognition (CVPR), **Best Paper Award** 2018:
Research on visual task space's structure; leveraging task space structure to optimize supervision policy of a set of tasks, the models learned using recommended transfers achieve much better performance than the models trained from scratch and come close to models that are trained with an order of magnitude more data with full-supervision.
My Technical Contribution: **6,000+** neural network models trained, **60,000+** lines of Python (Tensorflow), **~48,000** GPU hours
- **Visual Forecasting by Imitating Dynamics in Natural Sequences** Kuo-Hao Zeng, **William B. Shen**, De-An Huang, Min Sun, Juan Carlos Niebles
-IEEE International Conference on Computer Vision (ICCV), **Spotlight**, 2017:
Research on a general framework for visual forecasting, which directly imitates visual sequences by formulating visual forecasting as an inverse reinforcement learning (IRL) problem.
- **Feedback Networks** Amir R. Zamir*, Te-Lin Wu*, Lin Sun, **William B. Shen**, Jitendra Malik, Silvio Savarese
-IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017:
Research on novel feedback network paradigm that offers advantages including early prediction, taxonomic compliance and curriculum-based learning over traditional feedforward counterpart. <http://feedbacknet.stanford.edu/>

EXPERIENCE:

Stanford Vision and Learning Lab

Researcher

Stanford

2016/8-Present

- Computer Vision Research. Contributed to three publications in top computer vision venues (CVPR 2017, ICCV 2017 Spotlight, CVPR 2018 Best Paper);

- Advisor: Prof. Silvio Savarese; Mentor: Postdoc. Amir R. Zamir

Real-time Voice Call Transcription

Google-Project Fi

Software Engineering Intern

6/2016-8/2016

- Implemented prototype for real-time voice call transcription for Google Telephony Platform
- Developed backend infrastructure that generated real-time call transcription; demo ready Javascript frontend
- Mentor: Madhusudhan R. Adupala

Measuring Gradient Descent Batch Variance

Google-Google Brain

Software Engineering Intern

8/2016-9/2016

- Worked with Alex Davies on evaluating gradient variance to assist step-size and step-direction decision

COMPUTER AND LANGUAGE SKILLS

- Tensorflow, PyTorch, Torch, Python, Matlab, Java, C, C++

SELECTED COURSE HISTORY

CS229 (Machine Learning), CS238 (Decision Making Under Uncertainty), CS261 (Optimization and Algorithmic Paradigms), CS231A (Computer Vision: from 3D reconstruction to recognition), CS231N (Convolutional Neural Networks for Visual Recognition), CS331B (Representation Learning in Computer Vision), CS267(Graph Algorithm)