

JATUPORN TOY LEKSUT

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EDUCATION

University of Southern California, Los Angeles CA

+Research: Face and Expression Recognition

+Interest: Computer Vision \cap Computer Graphics, Deep Learning

PhD, Computer Science

May 2018 (expected)

The George Washington University, Washington DC

GPA: 3.92

B.S., *summa cum laude*, Computer Science

May 2012

TECHNICAL SKILLS (and frequency of uses)

Programming Languages

■■■□ Java, C++, Python, MATLAB, Bash

■■□□ JavaScript, SQL

Libraries/Systems/Software

■■■□ Caffe, Linux, dlib, OpenCV, OpenGL, Git, HPC

■■□□ Processing, jQuery

EXPERIENCE

Research Assistant for IARPA's JANUS Face Recognition Project at USC [2014-2016]

- + Designed and implemented a C++ module to **estimate head pose** and **3D-to-2D face alignment** using detected 2D facial landmarks
- + Designed and implemented a C++ module to **render multi-pose face images** by texture mapping a single face image to a generic 3D face model
- + Designed and implemented a C++ module to **extract facial expression descriptor** by fitting a linear combination of 3D expression blendshape models to a face image with detected facial landmarks
- + Trained **convolutional neural networks** e.g. GoogLeNet on millions of augmented face images
- + Implemented **face recognition** training and testing system prototype

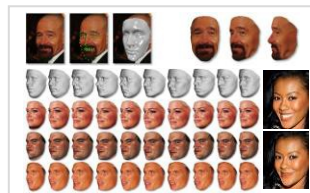
C++
OpenCV
OpenGL

Caffe

MATLAB

Teaching Assistant for CS Graduate course: Artificial Intelligence [2013-2014]

PUBLICATIONS



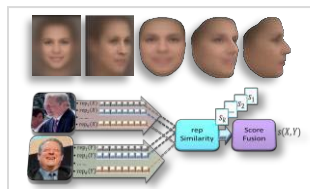
Do We Really Need to Collect Millions of Faces for Effective Face Recognition?

- + Provided multi-pose rendering of faces
- + Designed and implemented expression reduction module

C++, OpenCV, OpenGL

ECCV 2016 Spotlight Poster, Project page - bit.ly/augfaces

I Masi, AT Tran, T Hassner, JT Leksut, G Medioni



Face Recognition Using Deep Multi-Pose Representations

- + Designed and implemented image-based multi-pose rendering of faces, deployed on Linux and HPC

C++, OpenCV, OpenGL

WACV 2016, arXiv - <https://arxiv.org/abs/1603.07388>

W AbdAlmageed, Y Wua, S Rawls, S Harel, T Hassner, I Masi,

J Choi, JT Leksut, J Kim, P Natarajan, R Nevatia, Medioni

Expression Invariant 3D Face Modeling from an RGB-D Video

- + Provided expression reduction module using 3D expression blendshape technique

C++, OpenGL

ICPR 2016: D Kim, J Choi, JT Leksut, G Medioni

Accurate 3D Face Modeling and Recognition from RGB-D Stream in the Presence of Large Pose Changes

- + Provided 3D head pose estimation module

C++, OpenCV

ICIP 2016: D Kim, J Choi, JT Leksut, G Medioni

SIDE PROJECTS



Longdo Sija [2012]

bit.ly/LongdoSija

Google Chrome extension for instant Thai-English dictionary look up



Hippo Hat Girl [2012]

bit.ly/HippoHatGirlGame

Computer Game, Windows only



Ladybug [2012]

bit.ly/LadyBugGame

Computer Game, Windows, won 3rd prize from Games4Girls competition