QIAN Hangwei's Curriculum Vitae

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Education

Nanyang Technological University 08/2015-now
PhD in Interdisciplinary Graduate School

- JOINT NTU-UBC RESEARCH CENTRE OF EXCELLENCE IN ACTIVE LIVING FOR THE ELDERLY (LILY)
- GPA: 5.0/5.0

University of Science and Technology of China (USTC) 2011-2015
B.S. in Dept. of Automation in the School of Information Science and Technology

- GPA: 3.6/4.3
- Average Score: 87/100

Research Interests

- Machine Learning and Deep Learning
- Deep Learning have the ability to extract hierarchical abstract representations from images or natural language processing, and it has achieved state-of-the-art performance among many applications.
- What I intend to do is to use the machine learning and deep learning techniques to let the elderly to have better life. For instance, I can detect the elderly or objects in the videos or images to make judgment whether the elderly need help or have emergent situations and thus provide quick help.

Skills

- Programming Language: R, Java, C/C++, Python
- Tools: RStudio, VS, OpenCV, Matlab, LaTeX, Linux

Standard Tests

- GRE General Test: 324(Total) = 153(V) + 168(Q) + 3(AW)
- TOEFL(IBT Test): 102(Total) = 28(R) + 28(L) + 23(S) + 23(W)

Research Experience

- **Graduation Design Project** 02/2015-06/2015
  Invited by Gottfried Wilhelm Leibniz University,Hannover,Germany
  - Research Topic: Evaluating and improving calibration algorithms for time-of-flight cameras
  - Used Kinect v2 to set up new image databases (RGB images, Depth images and Infrared images)
  - Image calibration and projection
- **Research Assistant** 02/2013-02/2015
  In the Associated Lab of Network Transmission System and Control System
  - Advisor: Prof. Ming Zhu
  - Undertook auxiliary research assignments on image processing and deep learning
  - Managed OpenSUSE and VMWare

- **The Undergraduate Research Program** 06/2014-10/2014
  Human Facial Image's 2D and 3D Frontalization Based on ASM Algorithm
  - Advisor: Prof. Ming Zhu
  - Developed face detection, face alignment and face crop
  - Detected and recorded the 68 fiducial points and used iterations to refine the localization
  - Achieved the 2D images' triangulations
  - Obtained the right to use USF 3D Face Data and achieved the general human 3D face model
  - Achieved full correspondence between the 2D and 3D shape using a piece-wise affine transformation T
  - 2D and 3D human face frontalization
- **the 13th RoboGame Competition** 04/2013-09/2013
  Home Service Robot Dog
  - A group of five members
  - Designed the innovative appearance and structure of the robot dog
  - It's able to walk smoothly with its twelve legs and run in a certain path
  - It's good at catching and transporting goods and obstacle avoidance
  - It can recognize its owner with the help of Kinect
  - It can measure the environment's temperature, sounds, lights, etc
  - I'm in charge of the circuit designing and PCB designing

Awards

- 09/2014 Outstanding Student Scholarship (silver award, Top 15%)
- 09/2013 Outstanding Student Scholarship (gold award, Top 5%)
- 06/2013 Excellent Volunteers (awarded by China Foundation For Poverty Alleviation)
- 09/2011 Outstanding Freshman Scholarship (silver award, Top 25%)