

Haonan CHEN

PERSONAL DATA

ADDRESS: 1623 Providence Glen Dr., Chapel Hill, NC, USA, 27514
PHONE: (+1) 9198841656
EMAIL: chenhaonan1995@gmail.com
WEBPAGE: <https://chaonan99.github.io>
GITHUB: <https://github.com/chaonan99>

EDUCATION

University of North Carolina, Chapel Hill (Aug 2017-present)

Ph.D. in COMPUTER SCIENCE,

Advisor: Prof. Ron ALTEROVITZ

Tsinghua University (Aug 2013 - Jul 2017)

Bachelor of Engineering, Dept. of Automation

Thesis: Merging Lane Group Decision Making Based on Vehicle Infrastructure Cooperation

GPA: 88.77/100 RANKING: 17/139

RESEARCH EXPERIENCE

JUN 2017 SEPT 2016	Research Intern Megvii Inc. (Face ++) , Beijing, China <i>Person Re-identification in surveillance video</i>
-----------------------	--

- Propose to use pre-trained ResNet on person attribute task and transfer to person re-identification.
- The model achieves state-of-the-art result on serval public person re-id datasets.

JUN-SEPT. 2016	Summer intern University of Michigan <i>Long- time Domain Representation of Video and its Application in Video Description Generation Task</i> Advisor: Prof. Jason CORSO
----------------	---

- Implement various video description generation model with attention mechanism, based on NeuralTalk2 in Torch framework.
- Experiment on multiple datasets, including MSR-VTT, Tumblr GIF, etc.
- Maintain project page, set up http server and update the backend to the newest model we have.

FEB-JUN 2016	Research assistant Tsinghua Univerisy <i>Dense Optical Flow Estimation with Motion Vector for the Application of Real-Time Action Recognition</i> Advisor: Prof. Xiangyang Ji
--------------	---

- Using motion vector and other information to extract feature from original video flow, rather than decoding the video and calculating optical flow, which will extremely speed up action recognition process.
- Using frame glimpses and reinforcement learning method to train a model to decide which should be the next observation frame automatically, which will achieve time-invariance in action recognition process.
- Using attention based model to accurately locate the action so as to treat the detail of action better.

OCT 2014-FEB 2016

Research assistant | **Tsinghua University**

Optimal Placement of Traffic Guidance Facilities and Information Release Strategy in Small and Medium-sized Cities | Advisor: Prof. Jianming Hu

- Designed and built a comprehensive traffic management system web client.
- Designed the algorithm for the prediction of traffic situation, using Matlab.

PUBLICATION

Qiqi Xiao, Kelei Cao, **Haonan Chen**, Fangyue Peng, Chi Zhang. *Cross Domain Knowledge Transfer for Person Re-identification*. arXiv preprint arXiv:1611.06026, 2016. [[pdf](#)]

SCHOLARSHIPS AND CERTIFICATES

Apr 2016 MCM/ICM 2016, Meritorious Winner
 2015 University Scholarship of Tsinghua for Outstanding Artistic Performance
 2014, 2015 University Scholarship of Tsinghua for Outstanding Academic Performance

PROGRAMMING SKILLS

Basic skill: Python, C/C++, Java, C#, Go, Ruby, LINUX, ~~L~~**A**T_EX
 Web development: HTML/CSS/JS, AngularJS, Django, Ruby on Rails, Flask
 Data analysis: Python (pandas), Matlab, R, Julia, Mathematica, D3.js, Tableau
 Deep learning: TensorFlow, MxNet, Torch, Caffe

INTERESTS AND ACTIVITIES

Open-Source, Programming
 Music, Piano, Trombone, Symphony band