Nanxin Chen

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EDUCATION

Shanghai Jiao Tong University, China
B.S., Computer Science and Technology(ACM Honored Class) Sept 2011 - Jul 2015
Johns Hopkins University, Maryland
PhD candidate(supervised by Prof. Najim Dehak), Electrical and Computer Engineering Sep 2016 - Present

HONORS

- 2015 Excellent College Students of *China Computer Federation*(*CCF*)(granted by Alexander Wolf, President of *ACM*)
- *International Speech Communication Association*(*ISCA*) grant for *Interspeech 2015*(60 students worldwide)
- Ranked 3rd in the ASVspoof challenge 2015(28 teams worldwide)
- Xing Cai Scholarship, Shanghai Jiao Tong University, 2012 & 2013, awarded to only one student in each direction(totally four directions)
- Second Class Scholarship,Shanghai Jiao Tong University, 2011 & 2012, awarded to top 5% students
- ACM-International Collegiate Programming Contest(*ACM-ICPC*)
  - **Fifth Place**, The 2011 ACM-ICPC Asia Shanghai Regional Contest(Team Evolution)
  - **Fifth Place**, The 2011 ACM-ICPC Asia Phuket Regional Contest(Team Evolution)

PUBLICATIONS & PATENTS

- Yanmin Qian, **Nanxin Chen**, Heinrich Dinkel, Zhizheng Wu. Deep Feature Engineering for Noise Robust Spoofing Detection. Journal of Selected Topics in Signal Processing. (Accepted)
- Yanmin Qian, **Nanxin Chen**, Kai Yu. Deep Features for Automatic Spoofing Detection. Speech Communication, vol. 85, 43-52, 2016.
- Yuan Liu, Yanmin Qian, **Nanxin Chen**, Tianfan Fu, Ya Zhang, Kai Yu. Deep Features for Text-dependent Speaker Verification. Speech Communication, vol. 73, 1-13, 2015.
- **Nanxin Chen**, Yanmin Qian, Heinrich Dinkel, Bo Chen and Kai Yu, Robust Deep Feature for Spoofing Detection - The SJTU system for ASVspoof 2015 challenge. 16th Annual Conference of the International Speech Communication Association(InterSpeech), Dresden, Germany, 2015: 2097-2101
- **Nanxin Chen**, Yanmin Qian and Kai Yu, Multi-Task Deep Learning For Text-dependent Speaker Verification. 16th Annual Conference of the International Speech Communication Association(InterSpeech), Dresden, Germany, 2015: 185-189
- Yanlong Wang, **Nanxin Chen**, Kai Yu and Weida Zhou. A voice wake method and system. CN103956164 A
- Sibo Tong, **Nanxin Chen**, Yanmin Qian and Kai Yu. Evaluating VAD For Automatic Speech Recognition. 12th IEEE International Conference on Signal Processing(ICSP), Hangzhou, 2014: 2308-2314

PROJECTS

Research Capacity Ranking Tool in CS	a system to estimate the productivity, quality, and impact of each country or institution, supervised by John Hopcroft
WebDisk	an WebDisk project that supports uploading, managing and downloading files
db-auth-ldap-wrapper	an LDAP gateway linking our secured user database in MySQL
C Compiler	a fully optimized compiler for C language
Gardenia	a CPU emulation in verilog, includes one simple compiler
Nachos Operating System	an operating system built from scratch with virtual memory, file system, etc
Fatworm Database	a complete relational database system built from scratch, with JDBC support

EXPERIENCE

Hefei, China, *CNCC 2015* October 2015

- Attended presentation by Michael Stonebraker, who won the 2014 ACM Turing Award
- Received CCF Excellent College Students Award from Alexander Wolf

ICD, Dresden, *Interspeech 2015* September 2015

- Published 2 papers
- Received grants from *International Speech Communication Association*(*ISCA*)
- **Student volunteer**

Shanghai Jiao Tong University, *Research Assistant* September 2013 - September 2016
SpeechLab

- BTAS 2016 Competition
  - co-author of the submitted paper for IEEE 8th International Conference on Biometrics
  - Best result on unknown attacks, 3rd for all attacks
- Automatic Speaker Verification Spoofing Detection
  - Advisor: Yanmin Qian
  - Took part in the ASVSpoofing challenge 2015
  - Ranked 3rd(28 teams worldwide)
- Robust speaker verification using joint learning
  - Advisor: Kai Yu, Yanmin Qian
  - Built a robust speaker verification system
  - Used joint learning features given by joint deep neural network to enhance the performance of speaker verification
- Waking model for speech system
  - Advisor: Kai Yu
  - Constructed a waking system using simple body language such as claps to awake speech systems
  - Patent: A voice wake method and system

Shanghai Jiao Tong University, *Teaching Assistant* September 2012 - January 2013
Class: **Programming**

- Organized four programming lectures, four computer programming tests and related discussion lectures
- Designed a new class project(multi-player game AI) to replace old one(library management framework)