

Shicheng Chen

WORKING EXPERIENCES

- National University of Singapore
 - Research Assistant
 - School of Computing
 - Oct 2018 - Present
- Nanyang Technological University
 - Project Officer
 - School of Computer Science and Engineering
 - Oct 2017 - Sep 2018
- Teaching assistant
 - Neural Networks and Deep Learning (CS5242)
 - National University of Singapore
 - Jan 2021 - May 2021

EDUCATION EXPERIENCES

- Tianjin University
 - Bachelor of Engineering
 - School of Software Engineering
 - Sep 2013 - July 2017
- National University of Singapore
 - Master
 - School of Computing
 - Dec 2019 - Present

AWARDS

- Codeforces
 - Candidate master (user rate: top 4%)
 - Codeforces Round #664 (Div. 2): official ranking 38 out of 13064 (top 0.2%)
 - Codeforces Round #653 (Div. 3): official ranking 11 out of 11033
- Google Kick Start
 - Round A 2021: ranking 479 out of 19850 (top 2.4%)
- Facebook Hacker Cup 2020
 - ranking 1386 out of 32699 (top 4.2%)
- ACM International Collegiate Programming Contest
 - Asia Regional Contest
 - Shanghai Site: 2014
 - Bronze Medal
- The Beauty of Programming
 - ranking 250 out of 7764 (top 3.2%)
 - Hosted by Microsoft: 2015

SKILLS

- Competitive programming

- Machine learning

PUBLICATIONS

- Direct, Near Real Time Animation of a 3D Tongue Model Using Non-Invasive Ultrasound Images
 - **Shicheng Chen**, Yifeng Zheng, Chengrui Wu, Guorui Sheng, Pierre Roussel, Bruce Denby
 - Presentation in a **lecture** session
 - 2018 IEEE International Conference on Acoustics, Speech and Signal Processing
- Predicting Tongue Motion in Unlabeled Ultrasound Video Using 3D Convolutional Neural Networks
 - Chengrui Wu, **Shicheng Chen**, Guorui Sheng, Pierre Roussel, Bruce Denby
 - Presentation in a **poster** session
 - 2018 IEEE International Conference on Acoustics, Speech and Signal Processing
- Bus Travel Speed Prediction using Attention Network of Heterogeneous Correlation Features
 - Yidan Sun, Guiyuan Jiang, Siew-Kei Lam, **Shicheng Chen**, Peilan He
 - presentation at the SIAM International Conference on Data Mining (SDM19)
 - acceptance rate of 22.7%
- A Sequential Spatial Temporal Resnet for Task Prediction in Spatial Crowdsourcing
 - Dongjun Zhai, An Liu, **Shicheng Chen**, Zhixu Li, and Xiangliang Zhang
 - 24th International Conference on Database Systems for Advanced Applications (DASFAA 2019)
 - acceptance rate around 22%

PROJECTS

- Apache SINGA, an open-source deep-learning library
 - Make Singa support ONNX, an open format to represent deep learning models backed by Facebook, AWS, and Microsoft.
 - merged pull request(<https://github.com/apache/incubator-singa/pull/444>)
- GPU memory management
 - Achieve Singa 20-30% GPU memory usage save with only 2-5% extra computation time for popular networks such as ResNet, UNet, and VGG
 - To the best of our knowledge, we are the first one to try to save memory usage with very little extra computation time.
- Audio Source Separation
 - Obtain accompaniment and vocals from mix music.
 - More detail on <https://github.com/ShichengChen/Audio-Source-Separation>
- Multiview Hand Dataset
 - Annotate the hand pose for the hand dataset by semi-supervised learning.
 - Our dataset provides hand 3D models, depth, color images, and camera parameters.