Shicheng Chen

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

- 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

- Familiar with C++, Python

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

- 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.

- 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.