

Qianhui Sun

qianhuisun2020@u.northwestern.edu

872-302-9298

justqianhui.com

EDUCATION

Northwestern University – Evanston, IL

Anticipated March 2020

Master of Science in Computer Science, GPA: 3.93/4.0

Courses include: Machine Learning, Autonomous Vehicle, Computer Vision, Human Computer Interaction, Operating System

Tsinghua University – Beijing, China

June 2018

Bachelor of Engineering in Computer Science and Technology, GPA: 3.62/4.0

Courses include: Data Structures, Computer Architecture, Software Engineering, Operating System, Robotics, etc.

SKILLS

Proficient in C/C++, Python, Java, C#.

Familiar with TensorFlow, PyTorch, MATLAB.

Experience with JavaScript, React, PostgreSQL, MongoDB.

Experience in Computer Vision projects, Android and Web Application Development.

PROJECT EXPERIENCES

Memento – Northwestern University

April 2019 – June 2019

Computer Vision project: *A wearable reminder based on facial recognition*

- Designed a system that fetches images from Raspberry Pi camera and manages them locally.
- Wrote the function that uses trainable API to build models and manages face data.
- Implemented a function that speaks out names of faces when detected.

Traffic Sign Classification – Northwestern University

Jan 2019 – March 2019

Computer Vision project: *Several neural network structures that recognize traffic signs*

- Implemented several popular neural networks including CNN, RNN, LSTM, etc. with TensorFlow.
- Combined different NN models and tuned parameters to get better accuracy.

Forensic – Northwestern University

April 2019 – June 2019

Data Processing project: *A algorithm that reduces system-level data and preserves event chains*

- Implemented several methods to reduce events in system logs.
- Combined different methods into our algorithm and got better reduction rate.

SkillConnect (web application) – Northwestern University

Jan 2019 – March 2019

Web Application project: *A web application (frontend design) as an HCI course project*

- Designed and implemented a hierarchical web application with JavaScript, React.
- Improved user experience by incorporating with feedbacks from 4 rounds of user test.

WORK/ RESEARCH EXPERIENCES

Registration System – Tsinghua University

December 2017 – April 2018

Research Assistant: *A system that generates 3D images of objects and registers them*

- Implemented a function that generates 3D images from a series of pictures. (3D Reconstruction)
- Designed a way to register 3D images to robot coordination. (3D Registration)
- Designed a function that controls the robot by manipulating 3D images.

Tic-Tac-Toe Robot – Tsinghua University

June 2017 – July 2017

Research Assistant: *A robot that plays Tic-Tac-Toe on a real chessboard*

- Detection functionality: analyzing chessboard images and updated the chess state.
- Tic-Tac-Toe strategy: looking for the best grid to place a chessman.
- Moving functionality. searching for the best moving strategy to place the chessman and avoid obstacles.