

# Qianhui Sun

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## EDUCATION

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### Northwestern University – Evanston, IL

Anticipated March 2020

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

Courses include: Operating System, Computer Networking, Machine Learning, Practicum in Intelligent Information Systems

### 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

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Proficiency in C/C++, Python, Java.

Familiarity with JavaScript, React, R, Keras, TensorFlow.

Knowledge of C#, .NET, MySQL, CUDA.

Experience in Robot Development, Machine Learning Project, Android and Web Application Development.

## PROJECT EXPERIENCES

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### Memento – Northwestern University

April 2019 – June 2019

*A wearable reminder based on facial recognition*

- Implemented a functionality that fetches images from Raspberry Pi camera and manages images locally.
- Implemented a functionality that uses third-party trainable API to build models and manages face data locally.
- Implemented a functionality that speaks out names when faces are detected.

### Forensic – Northwestern University

April 2019 – June 2019

*A algorithm that reduces system-level data and preserves event chains*

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

### Traffic Sign Classification – Northwestern University

Jan 2019 – March 2019

*Several neural network structures that recognize traffic signs*

- Implemented several popular neural networks including CNN, RNN, LSTM, etc. with TensorFlow.
- Tuned parameters and got better results than some papers.

### SkillConnect (web application) – Northwestern University

Jan 2019 – March 2019

*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.

## RESEARCH EXPERIENCES

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### Registration System – Tsinghua University

December 2017 – April 2018

*A system that generates 3D images of objects and registers them to the robot coordination*

- Implemented a functionality that generates 3D images from pictures.
- Implemented a functionality that registers 3D images to robot coordination.
- Implemented a functionality that controls the robot by pointing at 3D images.

### Tic-Tac-Toe Robot – Tsinghua University

June 2017 – July 2017

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

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