# ZILONG LYU

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## EDUCATION

**Georgia Institute of Technology** Aug. 2018 - May 2020
**M.S. in Computer Sciences**
Courses attending: Database, Network, Computer Vision, Computer Animation

**Tsinghua University** Aug. 2014 - July 2018
**B.S. in Electronic Engineering** (GPA: 87.3/100)
Courses: Data Structures & Algorithms, C/C++ Programming, Object-Oriented Programming

## SKILLS

**Programming Languages** C/C++, Java, C#, Matlab, Python, Julia

## INTERN

**Microsoft STCA (Relevance & News Group)** June - Sept. 2017
*Classification of Polyphony Characters*

· Went through labeled sets to find out wrongly labeled samples.
· Used C# to build an annotation tool with UI for further labeling.
· Applied Active Learning to train a new CRF classification model with 17% less error.

**Delft University of Technology (DiCarlo Lab)** Nov. 2016 - Feb. 2017
*Electromagnetic Simulation*

· Used CST to simulate the performance and parameters of a newly designed waveguide.
· Used Matlab to implement a new algorithm to support arbitrary shapes.

## PROJECTS

**IEEE1588 Clock Synchronization** Feb. - June 2018
*Develop software to support clock synchronization based on IEEE1588 protocol*

· Used UDP sockets to support multicasting within network.
· Used C++ to implement state machines to support clock synchronization.
· Completed RTP stream transmission without time drift.

**Greedy Snake** June 2016
*Programmed with Java to write a game of greedy snake.*

· Used Java APIs to create a game with graphical interfaces.
· Used Socket and Server-Client Model to enable multiplayers.

**Facial Gesture Recognization** May - June 2016
*Used Matlab to design a classifier to distinguish human faces at different angles in images.*

· Applied PCA to reduce dimension of feature space to 300.
· Applied SVM to train a classification model with 95% accuracy on each class.

**Processor Disign** June - July 2016
*Implemented a basic processor on FPGA with frequency 70MHz.*

· Used Verilog to construct a CPU with fundamental functions.
· Used assembly to build a basic operating system which can run simple programs.