

# Yimin Chen

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## Education

### Northwestern University

Master of Science in Electrical Engineering, GPA 4.0/4.0

Evanston, IL  
Anticipated Dec. 2016

Relevant Coursework: Design and Analysis of Algorithms, Intro to Databases, Machine Learning, Intro to Communication Networks, Computational Photography, Biometrics, Probabilistic Systems, Human Computer Interaction, Tangible Interaction Design and Learning

### Wuhan University

Bachelor of Engineering, Electrical Engineering, focus on Communication and Signal Processing track  
GPA: 84/100 Major GPA: 87/100

Wuhan, China  
June 2015

### University of California, Berkeley

Summer Session, Electronic Engineering and Computer Science

Berkeley, CA  
Jun. 2014 - Aug. 2014

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## Project and Research

### Northwestern University Project

Jan. 2016 - Mar. 2016

- Helped Professor Mikhelson from Electrical Engineering and Computer Science department with a new course which will be opened in late 2016.
- Develop both the Android and web part for the course, which involved uploading pictures taken by a camera to the server and then showing the real-time images on both Android smart phone and the website.

### Northwestern University Human Computer Interaction Project

Jan. 2016 - Mar. 2016

- Did some pre-work for the project including problem statement, interviewing potential users, describing representative tasks, creating personas and scenarios, and making both paper and computer prototyping.
- Built a website for protesting based on the course theme, Civics and Activism and realized the following functions: creating a protest, searching for a protest under different catalogs and logging in personal account to find previous protests.

### Northwestern University Database Management System Project

Jan. 2016 - Mar. 2016

- Wrote a basic database management system called SimpleDB and implemented the core modules required to access stored data on disk.
- Wrote a set of operators for SimpleDB to implement table modifications, selections, joins, and aggregates.
- Implemented a B+ Tree index for efficient lookups and range scans in SimpleDB.

### Northwestern University Computational Photography Project

Sept. 2015 - Dec. 2015

- Learned and developed the basic function of the Tegra Tablet, based on Android Studio and Java.
- Did some Basic image processing with the picture taken via Tegra based on Matlab, including measuring sensor noise, simulating flash photography environment with a non-flash camera, synthesizing HDR images, synthesizing from images with different focus point, and synthesizing aperture images.

### Wuhan University Bachelor's Degree Thesis

Nov. 2014 - May 2015

#### Thesis: Research on Video-Based Pedestrian Counting Method

- Detected the pedestrian in the video of the street based on OpenCV.
- Counted the number of pedestrian in a sequence of time of the video based on OpenCV.
- Presented the new algorithm to detect the pedestrian which reduced the recognize errors.
- Improved the accuracy of the pedestrian counting method by around 3%.

### Wuhan University Undergraduate Science Research Project

Apr. 2013 - Apr. 2014

#### Multisensory Pedestrian Detection Systems Based on Arduino

- Programmed on Arduino to control the sensors to detect the pedestrian.
- Used MATLAB and OpenCV to detect the face of pedestrian in the Digital Image Processing area.

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## Work Experience

### Feidu Education Company

Wuhan, China  
Jan. 2015 - Aug. 2015

#### Tutor, Teaching Department

- Tutoring high school student of following courses:  
SAT Math, SAT2 Math&Physics, ACT Math&Science, AP Calculus&Physics

### Low-Frequency Electronic Circuit Course

Wuhan University  
Sept. 2014 - Jan. 2015

#### Teaching Assistant

- Responsible for checking the homework of students.
- Responsible for the lab section of the course.

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## Skills

- **Proficient with Language:** Matlab, C, Java, HTML5, CSS, SQL, JavaScript
- **Basic knowledge with Language:** OpenCV, C++, C#, Python