

# Kaixin Yang / 杨凯欣

## Personal Information

---

**Address:** Building 31, Peking University, No.5 Yiheyuan Road, Haidian District, Beijing, China

**Email:** kaixin\_yang@outlook.com

**Tel:** (+86)188-1131-8106

**Blog:** [sceneryinmirror.github.io](https://sceneryinmirror.github.io)

## Education

---

**Viterbi School of Electrical and Computer Engineering, University of Southern California,**

**Los Angeles, CA**

Aug.2019 – May.2024

*Ph.D. in Computer Engineering*

**Department of Electronics, School of Electronics Engineering and Computer Science,**

**Peking University, Beijing**

Sept.2015 – Jul.2019

*B.S. in Electronic and Information Science and Technology*

**Anqing No.1 Middle School, Anqing, Anhui**

Sept.2012 – Jul.2015

**Anqing Foreign Language School, Anqing, Anhui**

Sept.2009 – Jul.2012

## Research Experiences

---

**Research on Satellite Communication System and Network**

Oct.2017 – Present

*Advisor: Prof. Na Yi*

*Institute of Advanced Communications*

- Did a literature review for distributed relational databases, learned the principles and advantages of developing them systematically, and examined the feasibility of highly-reliable distributed relational databases by using Tencent's PhxSQL as an experimental example.
- Helped design a distributed storage scheme for the satellite communication system and simulate satellite communication channel.
- Exploring the way to implement applications on the GPU platform with OpenCL.

**Intel Cup Undergraduate Electronic Design Contest**

Apr.2017 – Jul.2018

- Designed *Lost and Found Cabinet with Personal Information Protection* based on Intel embedded platform called *Up<sup>2</sup> Board*, which aimed at facilitating retrieving the lost property.
- Established the database of the system and implemented the Web server based on Flask framework.

## **Experiment on Intelligent Hardware Applications Course Project**

May.2018 – Jun.2018

- Learned the methods of using GPIO, AD/DA and sensors on the platform *Raspberry Pi*.
- Developed the smart desktop device based on *Raspberry Pi 3B* board, with applications of calendars, reminders, weather forecast and speech control.
- Implemented offline speech recognition with CMU's PocketSphinx Speech Recognition toolkit, as well as online speech recognition and speech synthesis with Baidu Cloud Engine's APIs.

## **Skills**

---

Programming language: C++, C, Python, MASM, C51, OpenCL C, SQL, Verilog

Software & platform: Matlab, Cadence, LaTeX, TensorFlow, Linux

## **Honors and Awards**

---

- 2018    Excellent Presentation in The Sixth Peking University Young Scientists Symposium on Informatics
- 2018    Third Prize in 2018 Intel Cup Undergraduate Electronic Design Contest
- 2017    Award for Academic Excellence of Peking University in academic year 2016-2017
- 2017    Level 3 in National Computer Rank Examination
- 2016    First Prize in College Physics Contest awarded by Beijing Physics Society in year 2016

## **Extracurricular Activity**

---

### **Piano Association of Peking University**

Mar.2017 – Present

*Member of Publicity Department*

Designed posters and edited essays.

### **Student Affair Office, EECS, Peking University**

May.2016 – Jul.2018

*Student assistant*

Dealt with daily affairs of EECS undergraduate students.

## **Hobbies**

---

Photograph, Photoshop, piano, basketball, soccer