

# XINYU LIAN

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## EDUCATION

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**Zhejiang University/University of Illinois at Urbana-Champaign Institute**

*September 2018 - Present*

Bachelor in Electrical and Computer Engineering

Scheduled to study in University of Illinois at Urbana-Champaign from August 2020 to January 2021

**Performance:**

**GPA: 3.95/4**

**Rank: 4/31**

**Hong Kong University**

*July 2019 - August 2019*

Mathematical Laboratory and Modeling Summer School

**Performance:**

**Grade: A+**

**Award of Excellence**

## ACADEMIC RESEARCH

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**Research internship: Professor Yangjing Liang, Zhejiang University** Jun 2019-Jul 2019

Based on the robot assisted surgical, explore precise way on virtual reality training, camera calibration and 3D reconstruction. Find a method to do hand-eye calibration automatically and get the transform matrix of Christian Wengert's example.

**Second Prize of Excellent Summer Intern Project, awarded by ZJU-UIUC institute**

**SRTP: MapReduce with BSP Bridging Model, Linguistic Reflection** May 2020 - Present

MapReduce using the Bulk Synchronous Parallel Bridging Model and Linguistic Reflection.

The project is to show how the bulk synchronous parallel bridging model can be used to realise any MapReduce algorithm. The project exploits that the BSP model can be captured by specific concurrent Abstract State Machines (cASMs), which allows us also to identify algorithms that cannot be captured this way, but require some extensions, for which we explore linguistic reflection.

Expected to achieve results of interest to the scientific community that can be published in at least one article in a scientific journal such as Fundamenta Informaticae or Knowledge and Data Engineering and maybe a conference paper at DASFAA or SIGMOD.

## COURSE

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**ECE220: Computer Systems Programming**

Final MP: Using Dijkstra's algorithm and Pyramid tree to get the shortest path.

**CS225: Data Structure**

Final Project: Make a database processor:

1. Use B+ tree to search and modify the database in the storage.
2. Use B tree to find the data with similar part.
3. Use 2SAM(two-stack abstract machine) for the query operation.

## WORK EXPERIENCE

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### Teaching Assistant, ECE120

Spring 2020

Hold discussions and grade the homework and exams.

### Teaching Assistant, CS101

Fall 2020

Hold labs and grade the labs and exams.

### President of student union

October 2020 - Present

## AWARD

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Scholarship of ZJUI Institute, 30,000 RMB

Nov. 2020

Second-class scholarship of Zhejiang University

Oct. 2020

Second Prize of Excellent Summer Intern Research Project

Nov. 2019

Prize for Hackathon Competition

June 2019

Fifth place in Zhejiang University Table Tennis Competition

Nov. 2019

First Prize of Summer Social Practice

Nov. 2020

We went to be volunteer teachers in Songtao Autonomous Region, Guizhou Province

## PERSONAL SKILLS

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Relatively Skilled in Python, C++, C and Matlab

## PERSONAL TRAITS

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Highly motivated and eager to learn new things.

Strong motivational and leadership skills.

Ability to work as an individual as well as in group.