

# ZIQUING HUANG

☎ +86-18810007173 ✉ [hzq19@mails.tsinghua.edu.cn](mailto:hzq19@mails.tsinghua.edu.cn) 🏠 [tylto.github.io](https://tylto.github.io)

## Education

**Tsinghua University, Computer Science and Technology**

**Sep. 2019 – Present**

[Institute for Interdisciplinary Information Sciences \(IIIS\)](#)

*Beijing, China*

Yao Class, which is led by Prof. Andrew Yao

Undergraduate, GPA: 3.94/4.00, ranking 5/61

## Relevant Coursework

- Calculus (A)
- Linear Algebra (A-)
- Fundamentals of Programming (A+)
- General Physics (A)
- Abstract Algebra (A)
- Mathematics for Computer Science (A), given by Prof. Andrew Yao
- Introduction to Databases (A+)
- Fundamentals of Digital Electronics (A)
- Elementary Probability Theory (A)
- Algorithm Design (A)
- Fundamentals of Cryptography (A)
- Computer Architecture (A)
- Data Structures (A)
- Theory of Computation (A)
- Introduction to Robotics (A)

## Experience

[THUNLP](#)

**August 2021 – Present**

*Mentor: Zhiyuan Liu*

*Beijing, China*

- Information Retrieval (IR)
- Dense Retrieval
- Programming with Pytorch

**Microsoft Research Asia**

**July 2021 – August 2021**

*Mentor: Shuxin Zheng*

*Beijing, China*

- Group: Machine Learning
- Machine Learning Theory, especially the expressive power of Transformer and Graph Neural Networks(GNNs) on graphs
- Interested in Size Generalization of GNN

## Projects

Cryptography in Linear Size

**June 2021**

- Course project of Fundamentals of Cryptography
- Prove a non-trivial lower bounds of cryptographic primitives via gate elimination

Poker Project

**May 2021**

- Course project of Game Theory
- Use Deep Q Network to train a Texas hold'em poker player

## Awards and Honors

**Outstanding Student Leaders** | Department of Computer Science and Technology, Tsinghua University

**2021**

**Comprehensive Excellence Award** | Tsinghua University

**2020**

**First-class Scholarship for Freshmen** | Tsinghua University

**2019**

**First place in Chinese College Entrance Examination** | Beijing

**2019**

- Rank 1/34,345
- 711/750, with 148/150 in math and 294/300 in science (physics, chemistry, and biology)

## Leadership / Extracurricular Services

Key Member of the Student Union | IIIS, Tsinghua University

**Sep. 2020 - Present**

Class Leader | Yao Class 92, Tsinghua University

**Sep. 2020 - Sep. 2021**

## Others

**Languages:** Chinese (native), English (fluent), Japanese (basic)