# WANRONG HE 何婉榕

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# **EDUCATION**

## Tsinghua University, Undergraduate, ISSS

Sep 2019 – present

- Undergraduate student of Institute for Interdisciplinary Information Sciences, supervised by Andrew Yao
- GPA 3.90, Comprehensive Excellence Award (2019-2020 academic year), Comprehensive Excellence Award (2020-2021 academic year)
- Courses: Linear Algebra, Calculus, General Physics, Abstract Algebra, Probability and Statistics, Applied Mathematics of AI, Introduction to Databases, Algorithm Design, Machine Learning, Deep Learning, Theory of Computation, Computer Vision, Artificial Intelligence: Principles and Techniques, Natural Language Processing, Data Structure

# Tsinghua University High School, High School

Sep 2016 – Jul 2019

- Grand Prize and Gold Prize (Computer) in S.-T. Yau High School Science Award, National First Prize of Awarding Program for Future Scientists
- Principal Scholarship, Top 1% of AMC12

# 🚰 ACADEMIC EXPERIENCE & SOFTWARE PROJECTS

### **Curation Modeling**, Stanford HCI

July 2022 – Sep 2022

• Under the guidance of Prof. Michael Bernstein, model curators and predict curators' votes based on recommender systems and natural language understanding.

## Cheater's Quizbowl, UMIACS of Maryland University

Feb 2022 – present

- Under the guidance of Prof. Jordan Boyd-Graber, exploring how humans answer questions by using information retrieval systems and collaborating with multi-hop QA models.
- The paper Cheater's Bowl: Human vs. Computer Search Strategies for Open-Domain Question Answering is submitted to EMNLP 2022.

#### **Interactive Makeup Transfer**, Tsinghua Future Lab

Sep 2021 – Mar 2022

- Design UI for interactive makeup transfer. Users can dynamically refine makeup until satisfied.
- Based on PSGAN, design grid attention mechanism which allows for makeup combination of different facial parts.
- The paper ELEGANT: Exquisite and Locally Editable GAN for Makeup Transfer is accepted by ECCV 2022.

#### Interactive Spreadsheet Formula Prediction, Microsoft Research Asia

Jul 2021 – present

- Design hierarchical transformer-based decoder for formula sketch generation by multi-level expanding non-terminals in the parse tree. Support formula generation by interacting with humans.
- The paper HERMES: Interactive Spreadsheet Formula Prediction via Hierarchical Formulet Expansion is submitted to EMNLP 2022.

#### Study of Geometry Lecturing Tool Based on GeoGebra Plotting, Tsinghua High School Feb 2017 - Feb 2018

- Designed an interactive geometry lecturing tool that won Grand Prize in S.-T. Yau High School Science Award.
- Implemented the text analysis of the geometry exercise solutions and the synchronized highlighting of geometric figures.

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- Vice President of Student Association of Science and Technology; member of Business Intelligence Design Project;
- Organization Secretary of AI Class; volunteer recruiter for Tsinghua University;
- Interviews with 8 Tsinghua University alumni entrepreneurs during winter vacation;
- Led a 5-member team to complete the design of Intelligent Caregiver Management System, and achieved top 3 of the track in Tsinghua Great Idea Challenge
- Founder of "Tsinghua High School Little Banyan Tree Student Charity Fund"

## i ENGLISH

TOEFL: 110 (speaking: 24), GRE: 330+4.5, Excellent written and verbal communication skills

#### **C** TECH SKILLS

C++, Python, PyTorch, Linux, LaTeX, Shell Script, HTML, JavaScript, React