CURRICULUM VITAE
Aaron Kuang

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EDUCATION

University of California, Irvine (UCI)   Mar 2025 (Expected)
B.S. in Computer Science   GPA: 4.0/4.0
Campuswide Honors Collegium, ICS Honors Program.

RESEARCH INTERESTS

Computer Science Theory Education *(Primary Interest)*
My current research direction focuses on improving how students engage with and learn algorithm design. I do this by identifying common areas where students struggle, investigating how they seek help, and developing new pedagogical techniques/activities that foster students' problem-solving skills. In the future, I plan to extend my research to improve education in theory of computation and quantum computing courses.

Hybrid Quantum–Classical Algorithm Design *(Secondary Interest)*
I am interested in combining quantum and classical frameworks to create and analyze algorithms that can leverage the speedups associated with quantum architecture, while preserving enough of a classical foundation to make the algorithm feasible to run on NISQ devices. I also plan to analyze our results within the lens of quantum complexity.

RESEARCH EXPERIENCE

Student Help-seeking Behaviors in Algorithms Courses   Sep 2025 – Present
Advisor: Prof. Michael Shindler
Conducting semi-structured interviews to explore how students use specific help resources to help them understand algorithm design paradigms at UCI. We focus on identifying which help resources are commonly used and why.

Resisting Humanity's Mechanization in *Fahrenheit 451*   Apr 2023 – Jun 2023
Advisor: Dr. Katherine Raymond Walsh
Independent literary analysis project on *Fahrenheit 451* examining the consequences of over-reliance on technological tools and the subsequent abandonment of intellectualism.

TEACHING EXPERIENCE

Learning Assistant (University of California, Irvine):
Design and Analysis of Algorithms   Spring 2025, Fall 2025
Data Structure Implementation and Analysis   Fall 2024

AWARDS, HONORS, AND SCHOLARSHIPS

Victoria Alegria Tracy Endowed Scholarship   Sep 2023
UROP Humanities Core Research Paper Award Nomination   Jun 2023

AFFILIATIONS

UCI ICS Honors Program (ICSHP)   Sep 2025 – Present
UCI Campuswide Honors Collegium (CHC)   Sep 2022 – Present