

# Tse-Kai Chan

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## EDUCATION

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### University of California, San Diego

*Bachelor of Science in Computer Science, Regents Scholar*

San Diego, CA

Sep. 2022 – June 2025

## EXPERIENCE

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### Research Initiative at SU Lab

*UC San Diego Jacobs School of Engineering*

October 2022 – Present

La Jolla, CA

- I am learning and planning to research under Professor Hao Su at the SU lab at UC San Diego in the fields of Robotics, Machine Learning and Computer Vision through the Regents Scholar Research Initiative (RSRI) program.
- I am learning reinforcement learning on robotics, computer vision, and deep learning.
- <http://cse.ucsd.edu/haosu/>

### Software Engineer Intern

*Nearal*

Feb. 2022 – July 2022

San Jose, CA

- Nearal is a Silicon Valley startup and a location-based app for customers to search/browse and find local gig workers.
- I worked to develop the onboarding and sign-in/up interfaces of Nearal's android app in Kotlin, Android Studio and GitLab.

### Software Engineer Intern (Job Shadow)

*Cisco*

July 2020 – August 2020

San Jose, CA

- I worked with a mentor on implementing automation for server policy deployment on Cisco Intersight, Cisco's product for managing multiple servers.
- I used professional tools like Python, Ansible, and GitHub.

## PUBLICATION

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### Arbitrary Quantum State Coins - Implementation and Performance on Quantum-Walk-Based Algorithms

- Proposed and implemented arbitrary quantum state coins. Analyzed their performance for quantum-walk-based algorithms on quantum simulator and IBM Q. Mentored by Dr. Wenchao Xu, MIT.
- Published on 2022 IEEE ICPECA Conference ([IEEE Xplore](#)).

## AWARDS

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### Regents Scholarship

Sep. 2022 – Present

- The Regents Scholarship is the most prestigious scholarship awarded to undergraduate students at the University of California. Regents Scholarships are merit scholarships, selected on the basis of academic excellence.

### USACO Platinum | *Java, Adv. Data Structures, Adv. Algorithms*

Jan 2020 – Present

- Highest division in the USA Computing Olympiad (Top 200 Nationwide).

## COURSE WORK

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**Taken:** CSE 12: Basic Data Structures and Object-Oriented Design; CSE 20: Discrete Mathematics; CSE 21. Mathematics for Algorithms and Systems; MATH 183: Statistical Methods.

**Taking (Winter 2023):** CSE 30: Computer Organization and Systems Programming; CSE 151A: Introduction to Machine Learning; CSE 152A: Introduction to Computer Vision I

**Will Take (Spring 2023):** CSE 100: Advanced Data Structures; CSE 101: Design and Analysis of Algorithms; CSE 151B: Deep Learning; CSE 152B: Introduction to Computer Vision II

## TECHNICAL SKILLS

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**Languages:** Java, Python, Kotlin, C/C++, HTML/CSS, R, MATLAB, Assembly

**Skills:** Machine learning, Computer Vision, Problem-solving, Android Development

**Developer Tools:** Git, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, CLion, LaTeX, Jupyter Notebook

**Libraries:** PyTorch, NumPy, Matplotlib