kenchoi.dev

Kenneth Choi

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EDUCATION

Massachusetts Institute of Technology

EXPECTED MAY 2025

Candidate for B.S. in Computer Science and Engineering & B.S. in Mathematics. GPA: 5.0/5.0

Relevant Coursework: Distributed Systems Engineering (graduate, teaching assistant), Software Performance Engineering, Database Systems (graduate), Natural Language Processing (graduate), Computer Vision (graduate), Operating Systems, Design and Analysis of Algorithms, Software Construction, Machine Learning, Probability and Random Variables, Linear Algebra
Current Coursework: Statistical Data Analysis (graduate), Large Language Models (graduate), Fundamentals of Statistics

SKILLS

Programming: Python, C, Typescript, Go, Java, Swift, SQL, Git, Bash
Web Development: React.js, Node.js, Express.js, MongoDB, HTML/CSS
Machine Learning and Data Analysis: PyTorch, TensorFlow, NumPy, Pandas, MATLAB
Other Tools: Appium, AWS (S3, Lambda, Device Farm)

WORK EXPERIENCE

Databricks MAY 2024 - AUG 2024
Software Engineering Intern (Incoming) *San Francisco, CA*

MIT web.lab: Web Programming Class and Competition OCT 2022 - PRESENT
President, Academic Chair, Lecturer *Cambridge, MA*

- Coordinate operations for the web.lab class & competition with over 250 students, 100 projects, and $10,000 in prizes yearly
- Develop curriculum, give lectures, host office hours, judge projects, directly manage staff members, and communicate with sponsors and administration

Amazon Visual Search & AR JUN 2023 - AUG 2023
Software Development Engineer Intern *Palo Alto, CA*

- Developed a UI automation suite that automates visual data collection from competitor apps more than 80 times faster than the existing solution, scaling with AWS Device Farm
- Implemented an interface that aggregates data from multiple S3 sources into a common training bucket for researchers

Research Science Institute (RSI) JUL 2021 - AUG 2022
Teaching Assistant, Counselor *Cambridge, MA*

- Organized 1:1 oral presentation sessions with student researchers in computer science and physics during RSI 2021
- Led a daily check-in with 13 students and organized fun program-wide activities during RSI 2022

PROJECTS

Fortuna, *fortuna-2022.herokuapp.com* JAN 2022

- Developed a full-stack web application with an immersive virtual casino that interfaces with the Ethereum blockchain, winning 1st place out of nearly 100 teams at the 2022 MIT web.lab Competition
- Used a MongoDB, Express, React, Node.js (MERN) stack with Solidity for custom tokens and NFTs

Rodeo Algorithm for Quantum Computing, *doi.org/10.1103/PhysRevLett.127.040505* MAY 2020 - JUL 2021

- Developed the rodeo algorithm, a quantum computing algorithm that accurately reconstructs any eigenvector of a quantum Hamiltonian given an energy interval, as part of the Research Science Institute (RSI)
- *Rodeo Algorithm for Quantum Computing* published by Physical Review Letters (*> 60 citations*)

AWARDS

- 1st place at MIT web.lab Competition (2022)
- Research Science Institute (RSI) Top 5 Paper (2020)
- Regeneron Science Talent Search Scholar (2021)
- American Invitational Math Exam Qualifier (3x)

TEACHING EXPERIENCE

- Teaching Assistant – Distributed Systems Eng. (Spr. ’24)
- Lecturer – web.lab (IAP ’23, IAP ’24)
- Lab Assistant – Software Construction (Spr. ’23)