Cambridge, MA 02139 shkang12@mit.edu 413.835.5111

EDUCATION

Massachusetts Institute of Technology

Cambridge, MA

189 Vassar St,

Bachelor of Science in Computer Science and Engineering

May 2026

Relevant Coursework: Algebra I, Theory of Computation, Probability and Random Variables. Advanced Algorithm, Computation Structures

AWARDS/HONORS

- Silver Medallion, Brown University Science Olympiad
- Gold Medallion, Massachusetts State Science Olympiad
- Winner, Junior Engineering Technical Society (JETS) Massachusetts

PROJECTS

Image Processing System

Cambridge, MA

System Designer Feb 2024

- Engineered a robust image processing system utilizing Python, enhancing digital image manipulation capabilities.
- Implemented advanced pixel-level operations to tailor image attributes, achieving precise control over visual input.

MIT AI Alignment Cambridge, MA

Student Researcher Sep 2023 – May 2024

Conducted research relevant to reducing risks associated with Advanced AI, such as neural network interpretability, and goal misgeneralization in Deep Reinforcement Learning.

Promoted an idea inspired by an OpenAI researcher to emphasize the urgency of risks of AI in Modern Age.

WORK EXPERIENCE

Radical AI New York City, New York

Software Intern May 2024 – Present

- Develop a chat history feature using React and Firebase, ensuring security with Firebase Authentication.
- Create a Discovery section for users to browse and select custom prompts using React and Material UI
- Optimize data retrieval using Firestore queries for efficient data storage.

University of Massachusetts-Amherst Turing Program

Amherst, MA

Summer Project Researcher

June 2022 - Sep 2022

- Conducted in-depth analysis and developed a health sensing application that collected user's vital rate, activity, nutrition, and sleep schedule using Java.
- Launched a new blockchain coded in Java and JavaScript that would secure user's health records

Amherst Regional School Library

Amherst, MA

Web Organizer

Dec 2022 – April 2023

Used HTML, JavaScript, and CSS to build a website for the school library that would collect user's checkin/check-out data and compare it to the book records to ensure all checked-out books are collected.

LEADERSHIP

Mathematics Competition/Science Olympiad Club

Amherst, MA

Founder and Co-President

Oct 2018 – June 2023

- Co-founded a student-run club that focused on national-level Mathematics competitions.
- Built the club website using HTML and CSS that students could check to see their weekly tasks.

SKILLS

Proficient in Excel, PowerPoint, Word, AWS, Collaboration, Designing and Building Innovative Skills:

Technologies, Data Analysis, Problem-solving, Statistics, Probability, Computation

Programming: Proficient in Python, Java, JavaScript, C, OpenAI API, Google Gemini API, Machine Learning,

Natural Languae Processing, Tensorflow, Pytorch and HTML

Languages: Proficient in Korean, English, and French.