Elliot Chen

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EDUCATION

Massachusetts Institute of Technology

Cambridge, MA

B.S. in Computer Science and Artificial Intelligence, Minor in Finance

Expected Graduation: May 2025

GPA: 4.9/5.0

Relevant Coursework: Algorithms, Discrete Mathematics for Computer Science, Probability and Random Variables, Differential Equations, Linear Algebra, Fundamentals of Programming, Corporate Finance

Glenbrook South High School

GPA: 5.0/5.0 ACT Composite: 36

Glenview, IL

Aug 2016 - May 2020

EXPERIENCE

National Taiwan University Center for Artificial Intelligence

Taipei, Taiwan

Machine Learning Researcher

May 2023 - Aug 2023

- Designed convolutional neural networks (CNN) using PyTorch, OpenCV, and MediaPipe to analyze movement and speech impediments in patients displaying Parkinson's Disease (PD).
- Built an iOS/Android app which utilizes CNNs to analyze videos of patients' gait and speech in real-time.
- Assisted in deploying the mobile app to hospitals in the greater Taipei area.

Takachar Berkeley, CA

Process Engineer

Jun 2022 - Aug 2022

- Constructed a pyrolysis reactor that produced biochar, a resource for fertilizer and carbon sequestration.
- Designed a novel automated conveyance system for reactor biomass flow which doubled biochar output.
- Coordinated with Takachar engineering teams in India to perform reactor tests in rural villages.

Rohsenow Kendall Heat Transfer Laboratory

Cambridge, MA

Undergraduate Researcher

Sep 2021 - May 2022

- Characterized monovalent selective electrodialysis (MSED) and nanofiltration systems for nitrate recovery in polluted groundwater using ion chromatography, ICP-OES and Total Organic Carbon analytical techniques.
- Designed multiple experiments varying brine salt concentrations to gauge MSED divalent ion separation.
- Developed Python models to measure carbonate equilibrium and experimental pH changes.

LEADERSHIP

MIT Asian American Association | Events Chair

Sep 2021 - Present

• Organized 400+ person cultural events. Manage related food, entertainment, and publicity budgets.

Delta Tau Delta Fraternity | House and Risk Manager

May 2022 - Present

• Oversee property inspections and repairs. Ensure a clean and safe living environment for over 40 members.

PROGRAMMING

Languages: Python, Java, TypeScript, JavaScript, Matlab, LaTex

Libraries & Frameworks: PyTorch, Tensorflow, scikit-learn, OpenCV, MediaPipe, NumPy, Pandas, Node.js, Angular, Express, Git

SKILLS AND INTERESTS

- Proficiency in Mandarin
- Swimming (MIT Varsity Swim & Dive team member, high school All-American)
- Alpine Hiking (Wilderness First Aid certified, led weeks-long expeditions through CO Maroon Bells area)