# **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, Machine Learning, Advances in Computer Vision, Discrete Mathematics, Probability and Random Variables, Differential Equations, Linear Algebra, Corporate Finance

#### **EXPERIENCE**

DGV Solutions LP Minneapolis, MN

**Incoming Quantitative Analyst** 

June 2024

• Will be researching optimal put-write strategies with the goal of outperforming the CBOE Put-Write Index.

MIT App Inventor Cambridge, MA
Software Engineer Aug 2023 - Jan 2024

• Developing Tensorflow.js extensions that integrate Al and machine learning into the App Inventor, a visual

• Building iOS compatible data science and AI toolkits using Swift.

# **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 that analyzed movement and speech impediments in patients displaying Parkinson's Disease.

programming environment empowering over 6 million students to create their own apps.

- Built a backend server using Django for an iOS/Android app which used CNNs to analyze videos of patients.
- Assisted in deploying the mobile app to ten 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.

### **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.
- Developed a machine learning model using scikit-learn to predict experimental carbonate equilibrium and pH changes with 95% accuracy.

#### **PROGRAMMING**

Languages: Python, TypeScript, JavaScript, C, C++, Swift, Java, SQL, Matlab

**Libraries & Frameworks:** PyTorch, Tensorflow, scikit-learn, OpenCV, MediaPipe, NumPy, SciPy, Pandas, Django, Node, Git

## **SKILLS AND INTERESTS**

Proficiency in Mandarin, Swimming (MIT Varsity Swim & Dive team member), Delta Tau Delta Fraternity,
 MIT Asian American Association (board member), Alpine Hiking