Isaac Lo

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EDUCATION

Georgia Institute of Technology **May 2026**
M.S. in Computer Science, Specialization in Machine Learning *Atlanta, GA*

University of Illinois at Urbana-Champaign **May 2024**
B.S. in Mechanical Engineering, Minor in Computer Science *Urbana-Champaign, IL*

EXPERIENCE

Software Engineer Intern **Jan – June 2024**
TekCrafter *Remote*

- Led intern team in developing **frontend** of web application, utilizing **JavaScript**, **HTML,** and **CSS** within **Agile** development process

Engineer Intern **June – Aug 2022**
Balfour Beatty US *San Mateo, CA*

- Produced **engineering drawings** covering various components of overhead cantilever system
- Improved efficiency of engineering project workflows by creating and implementing a searchable directory
- Conducted weekly field measurements using field measurement devices, created **100+ FMS**

PROJECTS

GIF Video Face Filter Program

- Implemented face detection with facial landmark identification using **OpenCV** and **Dlib**
- Created algorithms for perspective warping algorithms using homography to enhance video quality

Image Compositing Tool

- Developed an image compositing program that takes a custom mask of an object in one image and blends it into another image
- Utilized **OpenCV** and **Python** to apply gradient-domain processing techniques like **Poisson blending**

Ultrasonic Metal Welding Quality Data Set Analysis

- Compared **machine learning** classification techniques on dataset of weld characteristic to identify best technique to predict surface condition
- Processed data with **pandas** and extrapolated **5** significant features out of datasets to use in our classification models
- Presented on the use of discriminant analysis out of analyzed techniques which was used to get **93%** prediction accuracy

Baby Name Generator using MLP

- Developed a **neural network** using **PyTorch** to generate unique baby names
- Trained on a dataset of **32,000** common names ensuring robust name generation
- Employed gradient-based optimization to fine-tune model parameters and improve the outputs

LEADERSHIP

Asian American Cultural Center *Intern* **Aug 2023 – May 2024**

- Served as a community leader, planning events and promoting inclusivity
- Organized successful speaker panel on Asian American issues by outreaching to professionals, holding meetings discussing script, and promoting to students

SKILLS

Languages: Python, C++, C, Java, HTML/CSS, LaTeX
Frameworks/Technologies: PyTorch, TensorFlow, OpenCV, React, pandas, Git, React, NumPy