Irene C. Lee

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EDUCATION

Georgia Institute of Technology **Summer, 2022**
Bachelor of Science, Computer Science [Concentration in Intelligence and Theory] *Atlanta, GA*
Minor in Economics GPA: 4.0
Honors Program

EXPERIENCE

Teaching Assistant **Spring 2021 - Present**
CS2110 Computer Organization and Programming [C] *Georgia Tech*

- Lead labs and hold office hours for the class. The class covers an overview of the basic structure and operation of a modern computer. Main topics include digital circuits, machine language instructions, and C programming.

Research Intern **Summer 2020 - Winter 2021**
Low Level Optimization for Deep Learning [Python • PyTorch] *Seoul National University*

- Analyze low level processes involved in training deep learning models in order to develop a platform with which training process can be optimized/faster. Current research may be applied to distributed systems as well.

SKILLS

- **Programming :** C | C++ | Java | Python | MATLAB
- **Languages :** English - native , Korean - native

PROJECTS/RESEARCH

Im2Vec : A Language Model Approach to Understanding Image Classification
Deep Learning Group Project [Python • PyTorch] **December 2020**

- Im2Vec is a language model approach to visualizing and understanding images in image classification task. Im2Vec generates image embedding vectors for each class of image and shows relationships among images of different classe

Social and Language Technologies (SALT) Lab Research
Natural Language Processing Research Project with Dr. Yang [Python • PyTorch] **Fall 2020-Present**

- Develop humor detection and generation models using natural language processing technique. Further study includes analyzing humors during covid pandemic in order to study how the pandemic has impacted people and how humor plays a role in it. Further study may involve not only humor detection and analysis but also humor generation.

Lemotif Research
Computer Vision Research Project with Dr. Parikh [Swift • Python • Tensorflow] **Spring 2020 - Fall 2020**

- Interpret journals using Natural Language Processing and generate an image based on the interpreted theme of the input entry using Generative Adversarial Network. Develop web server as well as an ios application that facilitate the use of the technology. (Web Demo Link: http://lemotif.cloudcv.org/) (IOS App Link: https://tinyurl.com/lemotifapp)

ORGANIZATIONS

- **Data Science at Georgia Tech** **Corporate Outreach**
  a student led organization focused on data science. As part of the leadership team, I plan special events for the club as well as reach out to the faculty and companies for sponsorship. The club hosts an annual data science hackathon, Hacklytics. I take the same role there as well. **May 2020 - Present**

RESEARCH PAPER

- ***Analysis of Input Pipeline Overhead for Training Image Classifiers with Data Augmentation*** **KSC 2020**
  - Grand Prize at Korea Software Conference(KSC) 2020
  - Key contributions include identifying how the model being trained, the CPU-GPU ratio, and the amount of augmentation affect the input pipeline overhead and its implications in the real world.