Samuel Lee

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Education

August 2018 May 2022

Vanderbilt University | Bachelor's in Computer Science, Math, Horn Performance

> **GPA** : 3.85

> Awards : Vanderbilt Academic Achievement Scholarship | Nat. Merit Scholarship Data Structures | Algorithms | Software Design | Linear Algebra | Statistics | Linear Optimization

Professional Experience

July 2020 Present

FringeAI | AI Engineer Intern, Boston, MA

- > Designed and implemented new factory inspection pipeline, achieving 2.5x speed and 1.2x accuracy over existing pipeline by using Fully Convolutional Networks
- > Demonstrated advantages of using Fully Convolutional Networks over Mask RCNN (state of the art) for controlled inspection applications
- > Partnering with supervisor to migrate company workflow to Tensorflow 2.2
- > Implemented performance improvements in existing inspection pipeline

Keras | TensorFlow 2.2 | TF Object Detection API | OpenCV | Jupyter | Docker | Google Cloud Platform

June 2020 August 2020

Vanderbilt University Data Science Institute | Summer Research Fellow, Nashville, TN

- > Designed and implemented code for experiments exploring individual differences in human visual object recognition with deep learning and correlation analysis
- > Implemented convolutional neural network architecture to model human vision
- > Examined effects of different image perturbations, weight initializations and data shufflings on neural networks' internal representation space

Singularity | SLURM | Python | Keras | TensorFlow 2.2 | Jupyter | Canonical Correlation Analysis

August 2019 April 2020

Vanderbilt University School of Engineering | Teaching Assistant, Nashville, TN

- > Assisted over 200 students in learning to implement data structures with C++.
- > Wrote test code for assignment grading scripts
- > Held twice-weekly office hours, provided feedback on assignments C++ Data Structures CLion

Lampus Involvement

July 2020 Present

VandyHacks | Development and Content Team Member, Nashville, TN

- > Wrote and deployed promo website for Vanderbilt's annual hackathon, hosting over 600 students from 68 schools across the U.S
- > Designed and taught workshops covering topics such as practical deep learning, mobile development and version control

ReactJS | Typescript | Javascript | HTML | CSS | GatsbyJS | Keras | Git |

Projects

TimeBricks 2020

☑ timebricks.netlify.app ☑ github.com/SamLee514/TimeBricks

Time blocking app that allows users to chain timers together for different tasks and plan work schedules for the future. Maintains user engagement by stopping the timer if user is no longer actively adhering to schedule. Integration pending : NodeJS, Express, MongoDB, React Native, Ğ Suite.

ReactJS TypeScript GatsbyJS

🗮 Technical Skills

Python, Javascript, Typescript, HTML, CSS, C++, Java Languages **Frameworks** TensorFlow 2.x, Keras, ReactJS (hooks), GatsbyJS Technologies Linux, Git, OpenCV, Singularity, SLURM, Firebase