

SICONG (SCOTT) LIU

scott@scott-liu.com ◊ (312) 566-6421 ◊ scott-liu.com

EDUCATION

Carnegie Mellon University – School of Computer Science

M.S. Computational Data Science

University of Illinois, Urbana – Champaign

B.S. in Electrical Engineering & Minor in Computer Science

August 2019 – May 2021

GPA: 4.00/4.33

August 2015 – May 2019

GPA: 3.80/4.00

EXPERIENCE

VMware, Inc.

Software Engineer Internship (MTS Intern)

Summer 2019

- Created a system to automatically evaluate Machine Translation quality through a fine-tuned BERT model
- Designed an iterative data-cleaning process to improve training results of this model, which further pushed its accuracy to state-of-the-art levels
- Engineered a robust, efficient RESTful API to serve this model on the companies internal network

VMware, Inc.

Software Engineer Internship (MTS Intern)

Summer 2018

- Researched, innovated, and implemented a state-of-the-art system for bug report classification and deduplication
- Significantly optimized multiple phases of the project by caching values that were computed repeated and grouping together similar queries, reducing the overall build and train time from 3 hours to 8 minutes
- Mentored two new interns by getting them up to speed with the project outlines, providing them with extensive programming guidance, and also assigning them suitable tasks that are within their skill level

Mstar Semiconductor, Inc.

Software Engineer Internship

Summer 2017

- Collaborated in a small team of Software Engineers and produced an online platform for image and video sharing between smart home-devices. The end product was similar in form to Pinterest or Instagram feed
- Implemented an image upload-queue scheme with features such as parallel uploading, pausing and resuming, and priority reordering
- Solved several elusive memory leaking issues that made the application crash after prolonged use

VMware, Inc.

Quality Engineer Internship

Winter 2016

- Tested multiple prototype products under the team lead's supervision and uncovered some minor bugs
- Assisted with internal error checking on a sample localization framework through a web interface
- Consolidated an internal research and development paper by providing valuable criticism

Xiaomi, Inc.

Junior Software Engineer Internship

Summer 2016

- Developed code for special cases of camera movement, for example when the line-of-sight is blocked
- Designed and implemented User Interface for a 3D game scene

RESEARCH & PROJECTS

US Patent: Practical Procedure for Duplication Detection in Textual Information Systems (Pending) Jun 2018 – Present
Lead Author

- Patented a state-of-the-art machine learning-based invention for detection of duplicate semantic reports

Personal Projects

iOS, macOS Developer & Web Developer

Jan 2016 – Present

- Mastered the entire iOS, macOS app-development routine, from initial design to final publication
- Hosted my personal website *scott-liu.com* on AWS to serve as my blog and to present my various side projects

TECHNICAL SKILLS

Computer Languages

Libraries

Applications & Tools

Python, C, C++, Objective-C, x86 Assembly

NumPy, Keras, TensorFlow, PyTorch, SKLearn, Flask, Matplotlib, Pandas

Linux terminal, Git, SVN, Vim, AWS, Xcode, L^AT_EX, Unity