Sander Lanbo SHI

(412) 478 7080 sandershi@cmu.edu sandershi.com github.com/sandershihacker

EDUCATION

CARNEGIE MELLON UNIVERSITY

B.S. COMPUTER SCIENCE MINOR IN MATHEMATICS Class of 2019

COURSEWORK

COMPUTER SCIENCE

Computer Vision
Machine Learning
Algorithm Design & Analysis
Data Science *
Complexity Theory *
Parallel Algorithms
Computer Systems
Theoretical Ideas in CS

MATHEMATICS

Real Analysis *
Calculus in 3D
Matrix Algebra
Discrete Math
Probability Theory
(*: In progress)

SKILLS

COMPUTER

Languages
Python • SML • C/C++
Matlab/Octave • Javascript
Typescript • Java

Technologies
HTML • CSS/SCSS • Angular
Meteor • Scikit-Learn
Android Studio PyQt5 • LETEX
Git • Linux (avid Arch Linux
user)

NATURAL LANGUAGES

English (Native/Bilingual) Mandarin (Native/Bilingual) French (Elementary)

WORK EXPERIENCE

HULU | INCOMING SOFTWARE ENGINEERING INTERN Seattle, WA | Summer 2018

• Will be a software engineering intern on the client data metrics team.

SCHRÖDINGER | SOFTWARE ENGINEERING INTERN New York, NY | Summer 2017

- Implemented features for a cross-platform protein sequence viewer in Python & Qt5.
- Improved synchronization between QtWidgets and reduced the code base by 10%.

OPENCHIRP | SOFTWARE ENGINEER (PART-TIME) Pittsburgh, PA | Spring, Fall 2017

- Developed a management framework for Low-Power WAN devices using Angular.
- Created a dashboard that interacted with the devices using a REST API.
- Integrated a map into the webapp that displays live locations of devices.

TUXLAB | SOFTWARE ENGINEERING INTERN Pittsburgh, PA | Summer 2016

- Developed a framework for creating interactive Linux courses using Angular Meteor.
- Integrated a web terminal (tty.js) into the web app.

PROJECTS

DEEP NEURAL NETWORK PARTITIONING ML Research Project | Spring 2018

• Working on partitioning neural networks across devices to lower energy consumption.

HANDWRITTEN DIGIT CLASSIFIER

Course Project | Spring 2017

- Implemented a Convolutional Neural Network with the LeNet architecture.
- Trained newtork on handwritten digits and acheived a 97% test accuracy.

GRIDWORLD RESOURCE COLLECTION AGENT Competition | Spring 2017

- Designed search algorithm to collect resources in a 2D grid within a number of steps.
- Won 1st place for 4 out of 5 rounds (Algorithms with a Purpose).

CMU STUDENT ORGANIZATION WEBSITE

CMU Club | Fall 2016

- Designed and developed club website of CMU Summit. (https://www.cmu.edu/summit)
- Helped students browse and sign up for courses.

ANDROID GAME: TARTAN TAG

Hackathon Project | Fall 2015

- Developed an Android game in a team of 4 during the HackCMU hackathon.
- Used barcode scanning API to scan barcodes to mimic shooting of lazers.

EXTRACURRICULAR ACTIVITIES

CMU Sahara | 2017 - Present

Member of the CMU Sahara dance group. Participated in multiple competitions.

Music | 2001 - Present

Play, compose and improvise on the piano with classical and Jazz music.

Public Forum Debate | 2012 - 2015

Went to four debate tournaments, won a quarter finalist prize and two best speaker prizes.