Sander (Lanbo) SHI

EDUCATION

CARNEGIE MELLON UNIVERSITY

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

COURSEWORK

COMPUTER SCIENCE

- Parallel Algorithms
- Computer Systems
- Computer Vision
- Functional Programming
- Theoretical Ideas in CS
- Imperative Programming
- Practical Ideas in CS

MATHEMATICS

- Concepts of Math
- Calculus in 3D
- Matrix Algebra
- Probability Theory

SKILLS

COMPUTER

Languages

- $\bullet \ \, \bigcirc / \bigcirc + +$
- SML
- Python
- Matlab/Octave
- Javascript/Typescript

Web Development

- HTML5, CSS3 & SCSS
- ASP.NET
- Angular 2
- Meteor
- MongoDB

Tools

- MFX
- Git
- Linux (avid Arch Linux user)

NATURAL LANGUAGES

- English
- Mandarin

WORK EXPERIENCE

SCHÖDINGER | SOFTWARE ENGINEERING INTERN

May 2017 - August 2017 | New York, NY, USA

• Will be developing a desktop application using Python.

OPENCHIRP | RESEARCH ASSISTANT

January 2017 - Present | Pittsburgh, PA, USA

- Developing the website and dashboard for an IoT device using Angular 2.
- Wrote code to send HTTP requests to communicate with a REST API.

TUXLAB | SOFTWARE ENGINEERING INTERN

May 2016 - August 2016 | Pittsburgh, PA, USA

- Developed a tool using Angular Meteor, that will be used to teach Linux based courses.
- Integrated a web terminal into the web app.

PROJECTS

CONVOLUTIONAL NEURAL NETWORK

Spring 2017 | Course Project | Computer Vision

- Implemented a convolutional neural network with the **LeNet** architecture.
- Achieved a 97% training accuracy on the first 3000 iterations.

SEARCHING ALGORITHM

Spring 2017 | Team Project | Algorithms with a Purpose Competition

- Designed and implemented a searching algorithm to find resources in a 2D grid and return them back to base within a certain number of steps.
- 1st place for 4 out of 5 rounds.

CMU SUMMIT WEBSITE

Fall 2016 | CMU Club Website

• Designed and developed the club website of CMU Summit, which helped students browse and sign up for courses. (https://www.cmu.edu/summit)

LOCAL WEATHER DATA COLLECTOR

Spring 2016 | Team Project | CMU Build-18

- Built a module using Photon boards and customized PCB boards that collected weather data and sent the data to a website during CMU Build 18.
- Visualized data on website using popular chart and graph APIs.

EXTRACURRICULAR ACTIVITIES

CMU Sahara | 2017 - Present

Member of the CMU Sahara dance group. Participated in 3 dances for a competition.

Music | 2001 - Present

Have been playing the piano since 2001 and the guitar for two years.

Public Forum Debate | 2012 - 2015

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

English Club President | 2012 - 2014

Held club events and organized activities twice a week and directed/acted in English plays.