## Sander Lanbo SHI

### **FDUCATION**

# CARNEGIE MELLON UNIVERSITY

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

### COURSEWORK

### **COMPUTER SCIENCE**

- Imperative Programming
- Practical Ideas in CS
- Functional Programming
- Computer Systems
- Theoretical Ideas in CS
- Parallel Algorithms\*
- Computer Vision\*
- Artificial Intelligence\*

(\*: In progress)

### **MATHEMATICS**

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

### SKILLS

### COMPUTER

Languages

- C/C++
- SMI
- Python
- Matlab/Octave
- Javascript/Typescript

#### Web Development

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

### **NATURAL LANGUAGES**

- English
- Mandarin

### **WORK EXPERIENCE**

### **OPENCHIRP** | RESEARCH ASSISTANT

January 2017 - Present | Pittsburgh, PA, USA

- Developing the OpenChirp website using Angular 2.
- Used REST APIs to communicate with the back-end.

### TUXLAB | SOFTWARE ENGINEERING INTERN

May 2016 - August 2016 | Pittsburgh, PA, USA

- Developed a teaching tool using Angular 2 and Meteor.
- Open-source development.
- Will be used to teach Linux courses.

### HUNDSUN TECHNOLOGIES INC | SOFTWARE ENGINEERING INTERN

September 2014 - October 2014 | Hangzhou, Zhejiang, China

• Tested socket programs for bugs.

### **PROJECTS**

### **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.

### ANDROID GAME: TARTAN TAGS

Fall 2015 | Team Project | HackCMU Hackathon

Collaborated with a team of four and developed an Android game mimicking the "Lazer Tag" game using bar-code scanning at the HackCMU Hackathon.

### **EXTRACURRICULAR ACTIVITIES**

CMU Sahara | 2017 - Present

Member of the CMU Sahara dance group.

Music | 2001 - Present

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

Theatre Tech | 2016 - 2017

Member of the lighting crew in the Scotch'n'Soda Theatre at CMU.

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.

Bike Stunt Club Founder | 2013 - 2014

Founded a bike stunt club and taught members how to perform tricks on street bikes.