

# WEIHAN LI

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## EDUCATION

**Carnegie Mellon University, Pittsburgh, PA**

05/2021

Bachelor of Science in Discrete Math and Computation

GPA: 3.9/4.0

Double Major in Computer Science

Dean's List, High Honors

**Selected Coursework:** Principles of Imperative Computation, Principles of Functional Programming, in Fall 2017, Spring 2018  
Natural Language Processing, Great Ideas in Theoretical Computer Science

## EXPERIENCE

**Research Assistant at Human Computer Interaction Institute, Carnegie Mellon University**

08/2018-Now

- Designed a defense-attack game featuring virus and defending bricks
- Built PC-functional prototype using PyGame and full version game using Unity based on conducted playtests

**Software Engineer Intern at Microsoft STCA-Ads Team, Beijing**

05/2018-08/2018

- Analyzed correlation between data and conducted anomaly detection to build counter analysis module in an auto-Direct Response Individual tool using Python
- Clustered data by description using Natural Language Processing
- Built data structures using XML and created web app to visualize using jQuery

## PROJECTS

**Wiki Question-Answering System**

09/2018-11/2018

- Conducted answering system given questions and wiki file using NLP algorithms
- Narrowed down to target sentence using tf-idf and cosine similarity
- Parsed sentence tree and left with most concise form using basic grammar

**Web app Smart Colors**

07/2018

- Compiled data to create database and constructed the Front-End and Back-End of the web app to give fashion and color combination suggestions using Django
- Cooperated on extracting data from internet using web scraping

**App LogChat**

02/2018

- Exported sorted and automatically formatted worklogs using Machine Learning
- Collaborated on building a chatroom for group work using sockets

**Star-Trek Style 3D Chess**

11/2017

- Built 3D interface and rotatable views and programmed 3D chess rules using Panda 3D
- Enabled one-player mode and best next move suggestions using AI algorithms

## SKILLS

**Language** Mandarin (Native), English

**Programming** Python, C/C++, Standard ML, HTML/CSS, JavaScript,

**Tools** pandas, numpy, Panda 3D, Open CV,

C#(intermediate), Java(basic)

XML, Django, jQuery

**Applications** LaTeX, Markdown, Unity, Adobe Photoshop, Adobe InDesign, Google SketchUp

## HONORS

**Virginia Tech Regional Mathematics Contest 2018 (North America)** Ranked top 5%

**William Lowell Putnam Mathematical Competition 2017 (North America)** Ranked 255

**Puzzle Hunt** of Fundamentals of Programming and Computer Science(15112) Ranked 3<sup>rd</sup>