# Olivia Zhang

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#### **EDUCATION**

## University of Illinois at Urbana-Champaign

May 2021

Bachelor of Science in Computer Science + Linguistics

GPA3.68/4.00

 ${\it Minor: Journalism}$ 

Data Structures

**Related Coursework:** 

Computer Architecture

Discreet Structures

Natural Language Processing

### **WORK EXPERIENCE**

China Mobile

Suzhou, Jiangsu, China / July 2019

Big Data Software Engineer Intern

- Developed the backend basis for an application that automatically collects and categorizes reviews about popular travel destinations from
  major travel sites, generates sentiment analysis results on the data for each location and sorts the extracted keywords according to
  occurrence frequencies, to help find matching travel destinations for users and customize their travel experiences effectively
- Collaborated with other interns on the project and presented the product to senior leaders in the company
- Worked extensively with python HTTP packages, automation tools and python NLP libraries to process, analyze and visualize the data extracted from web pages
- Applied OOP principles, optimized code with multithreading and tested for bugs and optimizations

**UIUC** 

Urbana, IL / August 2019 - present

Course Assistant

- Course assistant for CS 233 Computer Architecture (~6+hrs/week)
- Duties include co-hosting lab sections, holding lab office hours, developing course content, answering students' questions on Piazza
- Helped improve the course structure and developed course content to help the students better learn the material and perform well

#### The Daily Illini (Illini Media)

Champaign, IL / January 2019 - August 2019

Staff Writer

- Reporter for Life & Culture section, to inform readers of campus news and events that are affecting students and faculty lives
- Conducted in-person interviews with multiple sources for each story in order to collect key information for the stories through effective and professional communications
- Produced factual, quality reports under deadlines, regularly contributed creative story ideas at the weekly staff meetings

## **PROJECTS**

#### Language Identifier

- Python program that identifies the language used in the input (English, French or Italian), realized with letter/word bigram models and simple machine learning techniques used on a pair of training and testing corpus in the target languages
- Applied add-one and Laplace smoothing for words not seen in the training corpus and tested for higher accuracies

## **Image Flood-fill**

- C++ program that flood fills a PNG image through implementations of DFS and BFS, with an Animation class allowing to add frames and write to a file, a ColorPicker class that allows the user to pick the preferred color to flood fill the chosen image
- Generates creative animations from static images from scratch which can be used in website designs

#### **Date Extractor**

- Wrote and tested a python program that extracts fixed dates and holidays in various formats from an input text
- Utilized the python re library to construct regular expressions used to match the dates in the input

#### **ACTIVITIES**

Women in Computer Science (WCS)

Built by Girls

Active Member

Active Member

Active Member

UNICEF at UIUC Outdoor Adventure Club Women in Cybersecurity

Active Member Active Member Active Member

## TECHNICAL SKILLS

Programming Languages: Python, Java, C++, Verilog, Assembly, SQL, HTML

Soft skills: Communication, teamwork, flexibility, time management, problem solving