# Yuxuan Chen

GitHub/LinkedIn: Yuxuibbs | yuxuibbs.github.io | yuxuanc@umich.edu

#### **EDUCATION**

University of Michigan School of Information and School of Public Health Master of Health Informatics

Ann Arbor, MI Expected April 2020

**University of Michigan School of Information** 

**Bachelor of Science in Information**, Concentration in Information Analysis

Minor in Computer Science

Ann Arbor, MI April 2018

**SKILLS** 

**Advanced:** Python, MATLAB, C++ **Intermediate:** HTML, CSS, JavaScript **Beginner:** Bash, SQL, PHP, Ruby

#### **WORK EXPERIENCE**

# **Software Developer and Assistant Coach**

Ann Arbor Academic Games (A2AG)

September 2010 - Present Ann Arbor, MI

Build an application that reduces the amount of manual labor for Michigan Leagues of Academic Games tournaments

- Create data visualizations and summary statistics that rank players within each school to help coaches decide team configurations for the Academic Games Leagues of America National Tournament
- Create lesson plans and mentor students to prepare for local, state, and national tournaments

#### **Software Development Research Intern**

May 2016 - April 2018

University of Michigan, Department of Computational Medicine and Bioinformatics

Ann Arbor, MI

Ann Arbor, MI

- Develop medical image processing software to detect hematoma and hemorrhage in CT scans
- Improve accuracy of stenosis detection software to determine whether a patient needs surgery
- Refine kidney segmentation software to identify abdominal trauma in CT scans

## **Software Development Contractor**

June 2017 - September 2017

Ars Mentis LLC Ann Arbor, MI

- Use industry tools to optimize a PHP code base to make the code easier to read and maintain
- Audit HTML, CSS, and Javascript for bad practices and resolve issues

## C++ and Python Private Tutor

May 2016 - April 2017

Art Corner Studio

• Taught fundamental programming concepts to an elementary school student by creating tailored C++ and Python lessons and assigning small projects such as a Chess simulator

## **SIDE PROJECTS**

#### GitHub: Yuxuibbs

## Academic Games Player: agplayer.herokuapp.com

• Build a front end interface for a solution finding application for the game LinguiSHTIK using Python Flask, Jinja2, and WTForms for coaches and students to use as an educational tool

#### **World Cube Association Database Statistics**

• Use Python Pandas, NumPy, SciPy, Seaborn, matplotlib, IPython notebook, and Tableau to discover interesting statistics in the public World Cube Association database export

# CubeToaster

• Build an open source tool for Rubik's cube competition organizers to automatically generate sorted documents that were previously created and sorted manually, saving organizers several hours of work before each competition

#### World Cube Association Website: worldcubeassociation.org

- Resolve database bugs by preventing database entries from disappearing when an individual with subordinates is removed from the database
- Implement procedures to prevent competition organizers from accidentally refunding a competitor's registration fee when organizers are updating a competitor's registration data