Jesse He

Education

The Ohio State University, Columbus, OH.
Expected May 2022

Bachelor of Science in Mathematics, Honors Specialization

Bachelor of Arts in Computer and Information Science

GPA: 3.876

Projects and Research

SU 2021 **Emerging Issues in Cybersecurity REU**, *New Mexico Institute of Mining and Technology*, Sorocco, NM (online).

○ Under Dr. Subhasish Mazumdar, Developed a python package to generate synthetic tabular data with geometrically defined classes to investigate the behavior of machine learning explanation framework LIME

○ Presented at International Conference on Information Society (i-Society) and published in proceedings

○ Extended paper to be published in *International Journal For Infonomics* Vol. 14 Issue 1.

SP 2021 **CSE 3902: Interactive Systems**.

○ Developed a clone of *The Legend of Zelda* using MonoGame 3.8 with a team of six in biweekly sprints using an agile development strategy

AU 2020 **Hack OH/IO**.

○ Using Google AppsScript and Prismjs, created an automatic syntax highlighter in Google Docs as part of a 48-hour hackathon project with a team of four

Employment

OSU Department of Mathematics.

AU2021 **Student Grader, Math 5590H/5111: Honors Abstract Algebra I**.

○ Graded weekly homework assignments for a combined honors undergraduate and master's level course in abstract algebra covering groups, rings, and polynomials

OSU Department of Computer Science and Engineering.

AU2020-SP2021 **Undergraduate Grader, CSE 3521: Survey of Artificial Intelligence I**.

○ Evaluated and gave feedback for assignments in introductory artificial intelligence including problem solving, knowledge representation, and machine learning

○ Held regular office hours

AU2019 **Undergraduate Grader, CSE 2221: Software Components**, *The Ohio State University Department of Computer Science and Engineering*.

○ Graded assignments in an introductory software engineering course covering design-by-contract principles, mathematical modeling of software functionality, component-based software from client perspective, and layered data representation

○ Aided lab instruction and held regular office hours

OSU Media, Marketing, and Communications Scholars.

SP2020 **MMC Digital Sandbox Project Group Instructor**.

○ Developed and taught a 7-week project-based course in LaTeX

○ Also served as a Professional Development Co-Curricular for OSU's STEP Program

Skills

○ Python, C, C++, C#, Java, Javascript/HTML/CSS, LaTeX, Git

Languages

Mandarin	Conversational	Japanese	Basic
Spanish	Basic		