

Harumi Rebecca Shimano

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EDUCATION

Indiana University Bloomington

August 2018 – May 2023

Bachelor of Science in Biochemistry, Bachelor of Art in Computer Science

Harry G. Day Summer Research Scholarship

May 2020 & May 2021

EXPERIENCE

Indiana University Chemistry Department

Undergraduate Research

January 2020 – May 2022

- ❖ Introducing and reversing mutations into wild type proteins to explore combinations of reaction conditions that produce a higher selectivity of hydroxylation or different selectivity from the original protein.
- ❖ Utilized various programs from Rosetta (Comparative Modeling, Loop Modeling, De novo structure prediction) to produce secondary structures of proteins with incomplete known structures used in the lab.

Undergraduate Teaching Intern (UTIN)

Semester of Spring 2021

- ❖ Learning various teaching techniques through teaching assigned material to a group of Organic Chemistry 1 students.

Indiana University Computer Science Department

Undergraduate Research

January 2023 – August 2023

- ❖ Bioinformatics computational analysis focused on improving the categorization and labeling of essential genes within bacterial pan-genomes, particularly by identifying Leiden structures and colinear gene cassettes.

Undergraduate Instructor (UI)

Semester of Fall 2021

- ❖ Assist Introduction to Computers and Programming students to learn programming in python and understand the thinking processes for problem solving through coding.

Employment

Tutoring / Nannying

June 2020 – Present

- ❖ Tutoring in subjects that proficiency tests are passed. (Chemistry, Biology, Math, Python, Japanese, Violin)
- ❖ After school nannying for ESL student with parents moving to English speaking country.

Suzuki Method Summer School Translator/Interpreter

August 2016 – Present

- ❖ Translate written messages during the year and assist as an interpreter when international students gather in Japan.

K-12 Kumon Assistant Instructor (Math, English, Japanese)

May 2019 – August 2019

- ❖ Assist students to extend their abilities with better understanding of homework and extra assignments.

STRENGTHS & SKILLS

Professional

- *Programming Languages:* Python, Java, R, PostgreSQL
- *Laboratory Skills:* HPLC, Protein Purification, RosettaScripts

Personal

- *Languages:* English, Japanese, ASL (beginner level)
(Education through high school in Japan)
- *Creativity:* Violin, Photography, Robotics

EXTRACURRICULAR ACTIVITIES

Paso a Paso (Latinx culture/dance group)

August 2022 – May 2023

Special Olympics Gymnastics Assistant Coach

January 2019 – December 2022

Indiana University Chemistry Club

September 2019 – May 2022