Stanley Nicholson

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Education

Illinois Institute of Technology (IIT)

GPA: 4.0/4.0

- Joint Bachelor and Masters of Science in Applied Mathematics

- Minors in CS and Bioinformatics

- Camras Scholars Program

University of Wisconsin-Parkside (UWP)

GPA: 4.0/4.0

- Early College Credit Program

Lakeview Technology Academy GPA: 5.8/5.0

- Valedictorian

Experience

Researcher in Mathematical and Computational Biology

December 2021 - Present

- Developing mechanical theory of biochemical interactions using stochastic estimation of molecular dynamics simulations with Dr. Bob Eisenberg and Dr. David Minh
- Employing computational packages such as **NumPy**, **MATLAB**, **OpenMM** on UCSD's supercomputing center Expanse to generate and analyze molecular dynamics simulations
- Leading collaboration with postdoc at the NIH's National Institute on Drug Abuse to screen different opiates and understanding underlying mechanisms of opioid binding to the μ -opioid receptor

Co-founder and Lead Engineer of Receptify

October 2021 - May 2022

- Receptify was a student-first technology platform meant to provide justice and a clear path to resources for survivors of sexual violence on college campuses
- Lead interviews with student organizations, crisis centers, and university stakeholders and oversaw code development
- Secured \$19,000 in competition awards from the Grainger Foundation, the Kaplan Institute, and the SoReMo Initiative to develop the platform and forge a partnership with IIT

Researcher in COVID Drug Modeling

August 2021 - December 2021

- Established a novel and more useful statistical technique for analyzing drug-dose response for COVID Moonshot project with Dr. David Minh and Dr. Lulu Kang
- Demonstrated theoretical robustness of statistical model through numerical simulations
- Awarded RES-Match grant from Pritzker Institute of Biomedical Science and Engineering

Technical Skills

Python (6 years), MATLAB (2.5 years), LaTeX (3.5 years), React, Java, C#, SQL (1.5 years)

Extracurricular

Teaching Assistant for Multivariate Calculus

August 2022 - Present

Teach a recitation/discussion section and grade quizzes for 50+ students

President of the Machine Learning Club

August 2021 - Present

Organize bi-weekly ML seminars and career development workshops for 200+ person club