# **Aaron Wang**

(908)-386-6002 | awang27@nd.edu | linkedin.com/in/aaron-r-wang | aaronrwang.github.io

#### **EDUCATION**

## University of Notre Dame | Notre Dame, IN

(Expected) May 2027

B.S. Computer Science | Applied Computational Mathematics and Statistics

GPA: 3.95

CS Course work: Data Structures, Logic Design, Systems Programming, Discrete Math, Theory of Computing\*, Computer Architecture\*, and Programming Paradigms\*

Math Coursework: Linear Algebra, Calculus I-III, Probability, Statistical Methods\* and Differential Equations\*

(\* current)

#### **EXPERIENCE**

# University of Notre Dame | Research Assistant | Web3DB Project

February 2025 – Current

 Analyzed and researched relational databases, specifically PostgreSQL and MySQL, to design and implement efficient indexing within the Web3DB Project

University of Notre Dame | Teacher's Assistant | Discrete Math & Data Structures

September 2024 – Current

- Hosted weekly office hours to clarify concepts and supplement lectures, resulting in improved student understanding
- Created and graded problem sets with detailed feedback for 80+ students weekly to enhance their problem-solving skills and course performance

# iGoStem Academy | Teacher

(Summer) June 2022 – August 2023

- Taught a class of approximately 15 kids STEM-related activities, including solving a Rubik's cube, animation, and
  engineering, leading to increased engagement and understanding of STEM concepts
- Developed lesson plans for children who could not yet read or write, resulting in improved comprehension and participation in class activities

# **PROJECTS**

## Bible Journal App | In progress

Flutter, Supabase, SQL

- Creating an app with Flutter that encourages users to deepen their study, reflection, and prayer life
- Implementing Supabase to manage user authentication and data storage

#### TangoBot | GitHub

# Next.js, TypeScript, MongoDB, Python Playwright, YAML, GitHub Actions

- Working with a partner to deploy a dynamic website using Next is, showcasing solutions for every Tango game
- Designing and implementing an automated web scraper to extract content from the Daily Tango game, solve it, and upload the data to a MongoDB database

## Go-Stop | GitHub

## Node.js, Express.js, Socket.io, Rest APIs, React

- Developed a Full Stack WebApp that allows users to play the traditional Korean Go-Stop card game with friends and strangers in real-time
- Programmed a game in JavaScript, leveraging object-oriented programming principles and creating an engaging user interface with React

# LEADERSHIP AND ACTIVITIES

#### CS For Good | Notre Dame, IN | GitHub

September 2024 - Current

- Collaborated with a team to develop web applications for the Riverbend Community Math Center.
- Created an online keyboard and frequency analyzer to help students explore sound waves.
- Designed and implemented a Turtle web app to teach elementary students coding fundamentals, gaining hands-on experience with compilers and programming logic.

# Delbarton Peer Tutor | Morristown, NJ

September 2021 – May 2023

Peer Leader / Tutor

- Co-ordinated appointments for school of 600+ students and 30+ tutors
- Tutored 20+ peers over 2 years in Algebra, Geometry, and Calculus

## **HONORS**

Notre Dame Dean's List

Fall 2023, 2024 and Spring 2024

USACO Silver Division

2022

Bausch & Lomb Honorary Science Award

2022

#### TECHNICAL AND LANGUAGE SKILLS

**Technical:** Java, C, C++, Python, JS, React, Node.js, Next.js, SQL, MongoDB, REST APIs, Flutter

Languages: English, Mandarin (conversational)