# Marvin Jirapongsuwan

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### **EDUCATION**

University of Michigan, Ann Arbor

Expected: May 2026 B.S.E. in Computer Science GPA: 3.86/4.0

#### **EXPERIENCE**

# **Database Engineer Intern**

Ann Arbor, MI

Michigan Hillel

Sep 2023 - May 2024

- Maintained visual database Little Green Light (LGL) of over 87,000 constituent and event attendees' information records
- Validated and corrected data imported from physical spreadsheets into database to accurately track and minimize inconsistent information on sheets to improve information facilitation between departments

**Web Engineer Intern** Bangkok, Thailand

Delta Dynamics (DDX)

Jun - Jul 2022

- Designed prototype website in a team of 3 on Wix with complete UI/UX design and functionality for BMW
- Coordinated and attended client meetings across different divisions to gain insight for enhanced features
- Utilized agile methodology for 2-week sprint workflow to deliver features quickly and efficiently

**Data Analyst Intern** Phrae, Thailand

Wall's Ice Cream, Unilever

Apr 2018 - Apr 2021

- Presented and analyzed monthly performance data set of 4 ice cream truck routes; compiled orders into 39 graphs and bar charts for optimized route planning, and awareness of external factors
- Shadowed on-site workers' daily delivery through 4 routes containing over 100 stores and \$4k+ orders
- Conducted onsite research on optimal ice cream delivery, storage and schedules for the SAP HANA Resource Planning System

## **PROJECTS**

# Event Planning Tool, Hangout! | [https://github.com/enternal-L/hang-out]

- Feature-rich social media app enhancing event planning experience and minimizing user miscommunication
- Real-time events monitoring, instant notifications, and support for creation, storage, and sharing of users' personalized events
- Leveraged Next.js and React for frontend with backend built on Node.js linked with MongoDB database

#### Manual EQ Tool, Parrot Producer | [https://github.com/masterspin/Parrot]

- Spearheaded VST plug-in that facilitates EQ for music producers, user-friendly functionality for beginners
- Instant audio processing with GUI, allowing manual tuning of Frequency, Gain, Quality and EQ
- Developed on the JUCE Framework and C++

# Multimedia Fundraising Project, Astromania | [https://github.com/enternal-L/AstromaniaPhase2]

- Directed a Team of 11 consisting of Game Developers and Artists.
- Devised website hosted a game with 200+ plays and visits, earnings from competitive tournaments went to charities
- Wrote client-side dynamic pages with HTML CSS and JS, and leaderboard tracking on the backend using SQL

#### Heat Quantity Prediction/Analysis Website, Feel The Heat

- Led a Team of 3 to develop a website that displays past, present, and future heat map data of all countries
- Created Backend of the Website (Flask, Jinja) and Video presentation to enhance user experience
- Developed map visualization using Python with Folium, Matplotlib, Leaflet, and Geopandas

# **Shortest Path-finding Algorithm, findMe**

- Implemented an adaptable C++ program leveraging heuristic algorithms and graph theory to efficiently find optimal paths that addresses complex route optimization problems
- Utilized arbitrary insertion and MSTs to write an efficient branch-and-bound heuristic algorithm for the Traveling Salesman Problem to assist with hypothetical drone path-finding with minimal real-world drone flight restrictions

#### SKILLS

Languages	C++, Pytnon, SQL, JavaScript, Lua, MATLAB
Technologies	React, Next.js, Node.js, MongoDB, Pandas, Google Cloud

Coursework Data Structures & Algorithms, Computer Security, Computer Organization, Discrete Math

Certificates Google Data Analytics, AI Deep Learning Specialization, Harvard CS50: Intro to Computer Science

Dean's List (3x), University Honors (3x), Hackathon Winning Team, ANS Scholarship, Bronze Medal-ASMO Awards