# **Crystal Tran**

#### **EDUCATION**

# Applied Mathematics, B.S. - University of California, Irvine

Graduating June 2025

- Minor in Information and Computer Science
- Relevant Courses: Numerical Analysis, Real Analysis, Abstract Algebra, Linear Algebra, Probability, Statistics, Data Science, Differential Equations, Discrete Math (IP), Math Modelling (IP)

# Mathematics, A.S. - Orange Coast College

May 2023

Relevant Courses: Calculus, Statistics, Matlab Programming, Python Programming, C++ Programming

#### **SKILLS**

Languages: Python, Javascript, HTML, CSS, C++, Matlab

Developer Tools: Visual Studio Code, Scikit-learn, Pandas, NumPy, Plotly, Figma, Procreate

Technologies: Microsoft Excel, Bootstrap, Vercel, Git, Github

# **PROJECTS**

# Analysis of Mushroom Attributes - https://bit.ly/analysis-of-mushroom-attributes

June 2024

- Cleaned and preprocessed raw data for analysis using pandas, numpy, and scikit-learn for data scaling and balancing in order to prepare the data for machine learning models
- Utilized machine learning models for binary classification to predict poisonous and edible mushrooms based on selected features
- Explored the data and used additional regression models from scikit-learn to predict mushroom cap diameter given the stem dimensions

# **Heart Attack Prevention** - https://devpost.com/software/heart-attack-prevention

April 2024

- Analyzed large data in a team of 4 for Atlantis Datathon, the second annual datathon at UCI
- Employed core data science techniques such as data balancing and feature selection in order to prepare the data for machine learning models
- Utilized machine learning models for binary classification from scikit-learn to predict heart attack risk based on health factors

# Day Lilies - https://day-lilies.vercel.app/

November 2023

- A cute and cozy calendar web app with a functional to-do list and a reminder for chores all in one to assist people to remember to do certain weekly, monthly, and seasonal tasks.
- Responsible for design and frontend development in WebJam, a week-long web application competition
- Utilized Bootstrap, HTML, CSS, and Javascript for frontend development and procreate for design

#### **RESEARCH**

#### **Directed Reading Program** - Irvine, CA

March 2024

- Collaborated with a graduate mentor conducting research on quantum computing to do independent study
- Reviewed and finalized an academic paper on quantum information processing

#### WORK EXPERIENCE

#### Target Corporation Guest Advocate and Starbucks - Huntington Beach, CA

Feb 2022 - Present

- Assisted guests with their concerns at guest service
- Collaborated with a team to provide a quick, efficient, engaging, and safe guest experience