# Kenneth Ly

Rowland Heights, CA | kennethly909808@gmail.com | github.com/KenTree | linkedin.com/in/kenneth-ly-cs/

#### **EDUCATION**

# California State University, Fullerton (CSUF)

Fullerton, CA

B.S. Computer Science Expected Graduation: May 2027

• Cumulative GPA: 3.57

- Activities & Societies: Association of Computing Machinery
- Coursework: Data Structures, Object-Oriented Programming, Computer Assembly and Organization, Operating System Concepts, File Structure and Database, Software Engineering, Compilers and Languages

#### **PROJECTS**

# **Sonar Scanner**

C++, Arduino UNO

- Engineered a radar-style object detection system by programming an Arduino UNO in C++ to control an ultrasonic sensor mounted on a servo motor sweeping 180°, visualizing detected distances on a live radar interface
- Implemented real-time object mapping using ultrasonic sonar data processed via Arduino IDE and servo-driven angular sweeps, producing an on-screen radar visualization of surrounding obstacles.
- Optimized sensor sweep logic and data handling to reduce lag and improve accuracy of distance readings, enhancing clarity and responsiveness of the radar display.
- Integrated servo motor control with ultrasonic measurements to simulate radar scanning, creating an interactive visualization of nearby objects for educational and prototyping purposes.

#### **NASA APOD**

HTML, JavaScript, CSS

- Built a web application that fetched and displayed NASA's daily Astronomy Picture of the Day by integrating the APOD API with asynchronous JavaScript through dynamic image rendering and error handling
- Improved the usability and accessibility of the interface by optimizing layout with CSS Flexbox and semantic HTML through responsive design and intuitive navigation

# **Leftover Food Tracker (CSUF)**

Object-Oriented Programming, Git, Linux, C++, Backend

- Built a leftover food tracking system capable of handling 100+ unique entries per report by applying Object-Oriented Programming principles through composition and inheritance
- Improved reporting accuracy by writing 10+ validation and aggregation functions through robust input handling and edge case detection

# **CAMPUS INVOLVEMENT**

# **Association of Computer Machinery**

Algo Member, Open Source Member

Participated in workshops focused on Algorithms, Leetcode, and Advanced Algorithms

### TECHNICAL SKILLS

- Languages: C++, Python, JavaScript, HTML, CSS, MySQL, x86 Assembly
- Tools: Git, React, Linux, Arduino