Waleed Randhawa

wrandhawa@ucsd.edu (619)-213-9346

Aspiring first year student, looking for an early career internship. Strong background in computer science fundamentals and statistics, with a track record of applying this knowledge to solve real-work challenges (like fitness tracking and use of artificial organs in human body)

Education

Bachelors of Science- Mathematics-Computer Science, University of California, San Diego
Expected Graduation Date: June 2025
Major GPA: 4.0

Coursework completed
Data Structures & OO Design, Software Tools & Techniques Lab, Algorithm & Systems Analysis, Calculus II for Science and Engineering, Calculus-Based Statistics, Discrete Mathematics, Linear Algebra, Introduction to Programming and Computational Problem-Solving II

Coursework in progress
Design and Analysis of Algorithms, Multivariable Calculus, Mathematical Reasoning

Experience

Fleet Science Center – *Coding Instructor* June 2018 - February 2020

- Instructed at a number of different camps that taught Java programming to a range of children from 8-14 years of age
- Promoted coding in the younger generations to help raise interest in the field among children from all backgrounds
- Helped the main instructor teach the lesson to a group of students while also helping set up experiments and explain the functionality behind programming to the campers

Projects

- Arcade Mobile App (Android App)
    - Implemented three arcade level games in one app
        - Coin Flip- random number generating guessing game
        - Snake- classic old game where snake travels in a grid collecting apples, records high scores
        - Tic Tac Toe multiplayer game using Firebase (NoSQL database) to connect with online opponents
- Fitness Mobile App (Android App)
    - Login using Firebase system for secure login and password information storage
    - Actively tracks weight-lifting and nutrition goals of users
    - Generates user specific workouts based on user preferences that are initially set
    - Created using Java on Android Studio
    - Currently working to adapt to IOS apps using Swift
- Analog Based Artificial Pancreas
    - Used electronic circuit boards and electronic components to mimic the functionality of pancreas
- C++ based Artificial Pancreas
    - Created an Algorithm in an Arduino language (based on C++) to use readings from a pH sensor to accurately neutralize a basic or acid solution
    - Mimicked the function of human pancreas and learned how to develop/ troubleshoot adaptive algorithms

Skills/Programming Languages

Proficiency in Java, Proficiency in C++(Arduino-based), Mobile App Development,

Awards

- Provost Honors at UCSD
- 1st Place- Engineering at the Greater San Diego Science Fair (ISEF affiliate) (2018) - *Analog Artificial Pancreas*
- Honorable Mention-Electronics -California State Science Fair (2018) - *Analog Artificial Pancreas*
- California School Nurse Organization Award (2018) - *Analog Artificial Pancreas*
- California Academy of Nutrition and Dietetics Award (2019) - *C++ Artificial Pancreas*

Languages

English, Urdu, Spanish (limited-working proficiency)