

# Dakota Swank

Software Engineer

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## Relevant Experience

### Software Application Tester @ Boeing

May 2023 - Present // San Diego, CA

- Writes, executes, and reports test cases performed for web-based applications and creates various regression testing scenarios to evaluate effectiveness, quality, and scalability performance of web-based tools used across the customer enterprise and across the broader Intelligence Community (IC).

## Projects

### Fithub

Programming Language used: HTML, CSS, Typescript

Frameworks used: Angular

Platforms: Firebase

A fitness application that allows users to browse exercises, create customized workout plans, track their progress, and communicate with other users. The application utilizes a client-server architecture, with a User Module that provides a user-friendly interface for accessing the FitHub server's data tables.

### Outbreak

Programming Language used: C#

Game Engine used: Unity

A virtual reality survivor horror game set in space. The player takes on the role of a character navigating through a dangerous space environment, where they can encounter various obstacles and enemies that can cause damage to their character.

### Japanese Translator

Programming Language used: C++

Developed a translator that utilizes a deterministic finite automaton (DFA) to adhere to a specific set of rules. Using provided files containing various sentences, the program checks for syntactic and semantic accuracy. If the sentences pass this check, the program accurately parses and translates the story from Japanese to English.

### Musical Light Display

Programming Language used: C++

Developed an embedded system utilizing a Nucleo board that uses push buttons to select a Christmas song. When a song plays, three LEDs flash to the notes of the song, displays the name of the song on an LCD screen and when the song is playing a potentiometer is used for volume control.

### Lexical Analyzer GUI

Programming Language used: Python

Created a GUI application using Tkinter that implemented a lexical analyzer by taking the input of source code, reading it line by line, getting the lexical analyzed result, and then parsing it into a parse tree.

## Additional Links

🌐 [linkedin.com/in/d-swank](https://www.linkedin.com/in/d-swank)

## Technical Skills

- ❖ Object-Oriented Programming
- ❖ Data Structures
- ❖ Web-Development
- ❖ Computer Architecture

## Programming Languages

C++, Java, C#, HTML, CSS, JavaScript, Python, Assembly

## Libraries & Frameworks

Angular

## Tools & Platforms

Firebase, AWS

## Education

### California State University San Marcos

2022 - 2023 // San Marcos, CA

Bachelor of Science in Computer Science

### Miracosta College

2019 - 2021 // Oceanside, CA

Associate degree for Transfer in Computer Science

## Accomplishments

### California State University San Marcos

- Golder Key International Honor Society

### Miracosta College

- Phi Theta Kappa Honor Society
- President's Permanent Honor Roll

## Additional Skills

Leadership, excellent communication, writes clearly and concisely, thrives in a collaborative environment, actively meets deadlines, ability to manage multiple projects