

# Nathan Cheng

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## Education

**Bachelor of Science in Computer Science** – University of South Florida  
Minor in Entrepreneurship | *Expected Graduation December 2025*

*Aug 2021 – Dec 2025*

## Experience

### Apple | Software Engineering Intern

*May 2024 – August 2024*

- Developed new AR/VR video playback experiences in visionOS for the Vision Pro.
- Pushed to production on the AVKit framework for new and upcoming public feature.
- Technologies: Swift, SwiftUI, XCode

### MIT Lincoln Laboratory | Software Engineering Intern

*January 2024 – April 2024*

- Prototyped internal program using computer vision to increase system engineer time efficiency by 70%.
- Devised program architecture to generate digital CAD designs of avalanche photodiode chips for fabrication.
- Technologies: OpenCV, Python

### Northrop Grumman | Software Engineering Intern

*May 2023 – July 2023*

- Troubleshooted company software with unit testing that automates Jira and Confluence service tickets with a 96% accuracy.
- Automated user percentage capacity reporting within the company. Sent to management daily utilizing a Jenkins pipeline.
- Technologies: Java, Jenkins

## Projects

### Ducky Beat Maker

*Feb 2024*

- Developed fun creative music game for children with animated ducks that play instruments given by player.
- Utilized Swift synchronous libraries/frameworks to improve response time for the game.

### DisasterMap

*October 2023*

- Collaborated with a team to create React web application for disaster response powered by AI.
- Parsed JSON data from disaster alerts such from FEMA and NASA and plotted data onto a map using the Google Maps API.
- Gathered and fed news data to the GPT API, outputting the most relevant data about the disaster written by the LLM.

### BullyBlock

*October 2022*

- Developed a chrome extension to block hateful phrases and words on the web, including messaging apps.
- Utilized Javascript to parse through web pages replacing harmful phrases and words with asterisks in real time.
- Received 2<sup>nd</sup> place for SASEHacks 2022 in a team of two with 22 team competing.

## Leadership

### American Society of Mechanical Engineers | Technical Projects Chair

*August 2022 – May 2023*

- Organized USF's involvement in ASME sponsored competitions with over 300 members.
- Lead workshops on Arduino with over 30 students attending, teaching basics on microcontrollers.
- Prototyped and tested 3D printed hovercrafts with a team of five, placing 2<sup>nd</sup> at the IAM3D National Competition.

### Robotics Team Captain | Timber Creek High School

*August 2019 – May 2021*

- Founded a high school robotics team of 5 members, organized meetings, and facilitated roles.
- Qualified for VEX world championships, and placed 7<sup>th</sup> in the world for skills competition.

**Skills:** Virtual Reality/Augmented Reality Development, iOS Development, Mobile Development Music Production, React, Git

**Languages:** Swift, SwiftUI, C++, C, C#, Python, Java, JavaScript, Dart, HTML, CSS