

# STEVEN CHEN

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## Experience

### Lockheed Martin, *Embedded Software Engineer*

July 2019 –Present

- Facilitated daily scrums, retrospectives, and sprint planning ceremonies as Scrum Master.
- Designed and developed web app and embedded device for real time communication and metrics collection with 5G network.
- Work travel to support integration and testing for software releases.
- Developed Linux kernel module and bare metal code to improve DMA transaction by 140% for FPGAs.
- Refactored security verification in FPGAs to speed up boot time from 2 minutes to 10 seconds.
- Developed QT and Windows Desktop application to send, receive, and record 180Hz video from sensors/HIL system.
- Experience in compiling Linux Kernel for application/PCIe device compatibility.

### UCF/Lockheed Martin College Work Experience Program, *Systems Engineer*

May 2018 –April 2019

- Perform data analysis and predictions based on guidance from lead.
- Developed RF Link Margin Trajectory optimization tools.
- Developed an antenna GUI to plot Phi/Theta & Azimuth/Elevation heat maps, polar plots, and spherical coverage.
- Converted Radar Altimeter Antenna Model from Matlab to C++ for an integrated flight simulation system.
- Implemented path finding algorithm for flight path.
- Use MatLab to create GUIs to interpret and extract information from large datasets.
- Optimized MatLab code by applying vectorization where needed.

### Cardiac Project, *Undergraduate Researcher*

October 2016 – December 2017

- Processed and analyzed medical scans (MRI, PET, and CT) for the Right and Left Ventricle.
- Manually segmented 4,000+ medical scans for training data.
- Developed algorithms for quantification of pathologies and their automatic detection using TensorFlow.
- Used Convolutional Neural Networks and Dense Convolutional Neural Networks to segment medical scans.

## Projects

### China II, *Website for Restaurant - Firebase, React*

April 2020

- Designed, developed, and maintained a website to increase customer traffic to restaurant.
- Implemented a mobile friendly menu page.

### Virtually No Tag, *Website for Senior Design - MongoDB, Express, React, NodeJs*

May 2019

- Won best Senior Design Project of 2019 in Computer Science Department.
- Developed and designed UX to allow users to purchase permits and administrators to manage users and view statistics.
- Designed and developed a responsive frontend using Material theme.
- Integrated AWS-Amplify for Authentication, Redux for state management, and Stripe for payments.

### Kumo Asian Kitchen, *Website for Restaurant - Firebase, React*

December 2018

- Redesigned existing UX for mobile menu readability.
- Implemented an administrative panel to modify menu items.

### Pegasus Path Web Application, *Website - Angular, Firebase, Typescript, HTML 5, CSS*

April 2018

- Developed a responsive website using Angular 5 and Firebase.
- Lead a group of 4 members to create a Web and iOS App.

## Skills

- Languages: C++, C, JavaScript/TypeScript, HTML/CSS, Bash
- Web Knowledge: REST, Networking, Reverse Proxies, Nginx, UX
- Libraries: React, React Native, Redux, Angular 2+
- Tools: Visual Studio Code, Docker, Jira, Confluence, GDB, QT Creator, Git, GitHub, GitLab
- Databases: MongoDB, MySQL
- Basic Skills: Python, Java, SQL, Go, R, Haskell, MATLAB

## Education

### University of Central Florida

June 2015 – May 2019

- B.S. in Computer Science
- 3.786 Overall GPA
- Completed Coursework: Discrete Structures 2, Computer Science 2 (Algorithms), Web Server Management, Systems Software, Security in Computing, Object Oriented Programming, Processes of Object-Oriented Programming, Robot Vision, Operating Systems, Matrix and Linear Algebra, Calculus 3, Web and User Experience, Computer Architecture, and Malware Analysis