

Thomas J. Stepp

630-842-1284
tom.j.stepp@gmail.com

PROFESSIONAL EXPERIENCE

Software Engineer, Boeing AvionX	December 2017 – Present
<ul style="list-style-type: none">Architect of continuous integration suite for flight software team of 150 developersStreamlined integration from 10 to 1.5 hours via code generation, parallel toolbox, and caching serverBuild Matlab/Simulink development tools such as the signal manager and message loggerContinuous improvement and support of integrated simulation for testing of system designPlan and lead team through software upgrades of Matlab, Atlassian products, and GitScrum master for Model-Based Development Processes and Tools team	
Network Engineering Intern, Facebook	Summer 2016
<ul style="list-style-type: none">Created scripts for automation of network switch testing with Tcl and Ixia hardware APIDeveloped driver for IC chip with C++ to improve Wedge100 switch function and reliabilityAssisted with switch setup and procedure standards to maximize the team's productivity	
Systems Engineering Intern, GE Aviation	Summer 2015
<ul style="list-style-type: none">Produced MATLAB software tools to automate test validation for LEAP and Passport 20 engines	
Data Analyst Consultant, McDonald's Corporate	Summer 2014
<ul style="list-style-type: none">Created a process to standardize the financial coding of 20,000 products sold on the website	

EDUCATION

University of Southern California	Summer 2021
<ul style="list-style-type: none">M.S. in Computer ScienceRelevant Courses: Analysis of Algorithms, Computer Networking	
Purdue University	May 2017
<ul style="list-style-type: none">B.S. in Electrical EngineeringRelevant Courses: Software Engineering Tools, Algorithms & Data Structures, OO Programming	
Universidad Carlos III de Madrid (Study Abroad)	Spring 2016
<ul style="list-style-type: none">Completed engineering courses and projects in a culturally diverse environment	

DESIGN PROJECTS

Senior Design Project: USB Audio Headphone Amplifier	Spring 2017
<ul style="list-style-type: none">Programmed Tiva Microcontroller in C to display volume meter and equalizerInterfaced with touchscreen to display GUI, and digital potentiometers via SPI	
Computer Security	Spring 2017
<ul style="list-style-type: none">Used Python to write encryption algorithms such as AES and RSAWrote firewall filters and buffer overflow attack programs	
Game Programming	Fall 2016
<ul style="list-style-type: none">Created Super Mario-like game for Windows machines in JavaCreated the classic Zork text-based game in C++ to play on a terminal	
The Useless Box	Fall 2015
<ul style="list-style-type: none">Created embedded C algorithm to close box and perform tasks with a combination of switches	

LEADERSHIP EXPERIENCE

Community Outreach Focal, Boeing (Long Beach Site)	Summer 2018 - Present
<ul style="list-style-type: none">Inspire 6th - 12th grade students to pursue STEM careers through interactive projects	
Faculty Committee Chair, ECE Student Society	2015-2017
<ul style="list-style-type: none">Connecting students and faculty to create a better learning environment for all ECE students	
Eagle Scout, Boy Scouts of America	January 2012
<ul style="list-style-type: none">Executed workshop to teach essential outdoor skills, igloo camping and orienteering	