

Jack Thomson

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U.S. + Canadian Citizen

EXPERIENCE

Wisk Aero

March 2019 - Present

Flight Software Verification Engineer

Atlanta, GA

California Based aerospace startup focused on bringing vertical flight to the public

- Created over 500 High Level Tests/Blackbox via the pytest library for verifying flight software on a novel vertical takeoff aircraft
- Wrote 200 Low Level Tests/Whitebox in a new and mostly untested code base
- Created ICD to document message protocol between two subsystems which was used to write certifiable code
- Evaluated Modified Condition/Decision Coverage (MCDC) tools for C software and presented findings to team
- Implemented VectorCAST software coverage tool on Hardware in the Loop setup of aircraft boards
- Performed a Pre SOI 3 Audit to demonstrate acceptable processes per DO-178C
- Peer reviewed over 50 software requirements for a multi-processor message routing system

WREK Atlanta Engineer

March 2016 - Present

Atlanta, GA

The 100,000 Watt Student Voice of Georgia Tech

- Planned, and oversaw move of studios from the Georgia Tech Student Center to a new space
- Reassembled signal chain into two PR&E Impulse 99-1060-2 broadcast boards including CD, cassette, microphones, compressors, automation system and record players
- Documented and maintained HT-HD+ Harris transmitter (Primary) and Broadcast Electronics FM-10A (Backup) transmitter via bi-monthly transmitter tests
- Assisted in emergency transmitter low power FM station setup with GEMA for COVID-19 testing site
- Installed new ARC Solo with web and phone monitoring notification to track silence, tower light status, HD radio status, and shack status
- Upgraded Audiovault Automation system to latest version in order to support a Windows 10 Upgrade
- Migrated website, streaming, and archive virtual machines from Xenserver to XCP-NG to increase server uptime
- Supported and troubleshooted Georgia Tech sports to broadcast over Comrex BRIC and ISDN on WREK for over 100 games

EDUCATION

Georgia Institute of Technology

December 2018

B.S. in Electrical Engineering

Atlanta, GA

PROJECTS

Smoothie Modular Synthesizer - Best Performance Engineer

Moog Hackathon

Atlanta, GA

Two day hackathon to create a new instrument that utilizes a Moog synthesizer

- Utilized basic DC motors and common amplification circuits to create a blender controlled by the VCO, VCA and VCF of a Moog Werkstatt
- Demonstrated and performed an experimental music piece using food and the sonically controlled Smoothie

TECHNICAL STRENGTHS

Amateur Radio

Technician

Computer Languages

C, JavaScript, Python, Bash, L^AT_EX

Protocols & APIs

JSON, Serial, WQTT

Tools

Git, VectorCAST, Bamboo, Docker, nginx, Xenserver

Software Workflows

DO-178C, Agile