

**EDUCATION: University of Alabama in Huntsville**

**B.S. Electrical Engineering**

## ACTIVITIES AND ACHIEVEMENTS

### **Brockwell Technologies, Inc.**

**September 2020-Present**

Team Lead / Software Engineer

- Boeing's primary point of contact for maintenance and development of Databots real time data streaming service
- Boeing's primary point of contact for maintenance and development of MeteorService API
- Experience using tools such as C++, MQTT, Protobuf, C#, Python, Docker, MongoDB, ZMQ, and FTP
- Designed and implemented unit tests to cover legacy code and additions to legacy code for MeteorService in C++
- Lead effort to redesign and rebuild PrintClient using MQTT and Protobuf in C++
- Lead effort to redesign and rebuild DatabotsService microservice using MQTT and Protobuf in C++
- Designed and implemented save feature in InkboticsExplorer in C++
- Optimized legacy code to allow for configuration of multiple cameras at once in C++
- Optimized legacy code to efficiently store recorded data in mongoDB in C++

### **Brockwell Technologies, Inc.**

**December 2019-September 2020**

Front-End Engineer

- Experience using tools such as Angular, Angular JS, Java, Javascript, Typescript, CSS, HTML, and MySQL
- Wrote unit tests covering front-end Angular elements
- Refactored to remove deprecated code and vulnerabilities during transition from AngularJS to Angular

### **Brockwell Technologies, Inc.**

**August 2019-Present**

Cyber Product Development Lead

- Primarily responsible for the management and development of the Cyber Range-In-The-Box full stack web application with virtual environment orchestration
- Experience using tools such as Python, Django, HTML, CSS, Javascript pyVmomi, MySQL
- Designed and implemented user interface, authentication, request handling, input validation, DB schema, DB queries and virtual machine orchestration.
- Other tools used include, ESXi, vSphere, VMware, ELKstack, PfSense, Kali Linux, and Windows Server
- Developed timelines, requirement specification, requirement verification, and all other ISO9001:2015 requirements
- Familiar with AGILE development concepts and applications including: Jira, Bitbucket, and Github

### **Dynetics**

**December 2015-August 2019**

SOC Analyst Trainee

- Experience using tools such as Flask, Django, ELKStack(Elasticsearch, Logstash, Kibana), Virtualbox, VMWare, Kali Linux, Ubuntu, CentOS
- Wrote Outlook add-on in C# to allow users to report phishing emails
- Cowrote Whistler client and admin panel to retrieve system data from host's registry and forward to log server
- Helped create honey network, Loki, conducted "purple teaming" on Loki
- Cowrote tool to detect and log injected threads in C#
- Designed and implemented full stack web application, Honeydoc-Tracker. Used to track status of infected word docs
- Created suite of tools for decoding/encoding, memory analysis, macro detection, and phishing in Python

**Portfolio:** <https://malcolmjjefferson.github.io/>