Colt Darien

Education

2012–2016 B.S. Computer Engineering, Colorado State University, Fort Collins.

Experience

Vocational

2016–Present **Test Automation Engineer, Xpanxion**, (xpanxion.com).

- Test Automation for Anthem Blue Cross Blue Shield:
 - Automated tests for the Anthem website
 - Worked with Atlassian tools (Jira, Bamboo, Confluence, etc) including the REST API
 - · Wrote tests in cucumber and java using Selenium

Senior Design

2012–2016 Brain Controlled Smart Home, (Link), Supervised by: Dr. Sudeep Pasricha.

Worked on a team of 3 with smart home devices, and brain control technology in order to allow users to be more independent and comfortable in their own homes. During the course of this project we were able to write code that would allow us control several smart devices including a lamp and a power strip using only our thoughts. We also develop a virtual reality that could be controlled using mental commands. This allowed us to train patients and test our code for flaws in a safe and easily modifiable environment.

Extra Curricular

2012–2016 Hashdump Security Club, (hashdump.org).

A computer security club at CSU where students teach each other about new security principles and threats.

Detailed achievements:

- Member all four years of school at CSU
- Officer during Junior and Senior years
- Rocky Mountain Collegiate Cyber Defense Competition (RMCCDC):
 - CSU started as the only team to compete that was not sponsored by a class, or organization (all members self taught)
 - Placed 2nd out of more than a dozen teams in my final year (2016)

Coding Languages

C++ Intermediate: Most of the code for Brain Control Project as well as several courses at CSU

C# Beginner: Self taught/Online tutorials so that I could help a friend with a project

Golang Intermediate: Used for research/implementation of hybrid crypto system, and networking on Senior Design project

Java Intermediate: Used for a majority of classes that required students to write code

Python Intermediate: Main language used in algorithms course at CSU

REST Beginner: (Atlassian/Jira specificallly) interact with web resources

Selenium Intermediate: Automation of Anthem website for testing purposes

Sh/Bash/mksh Beginner: Wrote basic scripts for on linux machines to do various tasks

SQL Intermediate: Test data management for Anthem/Xpanxion

Computer skills

Ansible Beginner: Created and used several Ansible playbooks for maintaining containers on my

personal server

Containers Beginner: LXC and Docker for personal use on home server

Linux Intermediate: Familiar with 'apt' and 'pacman' package managers. Moderate linux adminis-

tration knowledge. Very comfortable with linux terminal

VCS/Git Intermediate: Used 'git' and github/git labs for several projects

Hardware Intermediate: B.S. Computer Engineering and past tinkering give me lower level knowledge

than many developers

Relevant Course Work

 Operating Systems (CS370) Covered such topics as: Basic operating system terminology, Processes and thread management, Scheduling algorithms, Memory management concepts, Interprocess communication, Synchronization, Deadlocks and resource management, File System and storage architecture, Symmetric multiprocessing, and Virtualization.

- Computer Organization and Design (ECE 451/452) extended CS370 and also went in depth with chip deisgn paradigms as well as problems facing the technologies.
- Hardware/Software Design of Embedded Systems (ECE561) Extended ECE452 further and covered topics like power, system level modeling, design space exploration, hardware-software partitioning, high level synthesis.
- Computer Security (CS356) explored some of the security measures that can be employed to safeguard systems and the information contained therein. Covered topics such as buffer overflows, SQL injection, XSS, pathname attacks, etc.
- Software Engineering (CS314) put us in a team and tasked us with projects that included full revision control. We used SCRUM, and talked about 'agile' project management.
- Computer Networks (ECE456) covered the networking stack architectures, TCP and UDP communication, and socket programming.

Hobbies and Interests

- Longboarding
- Multicopters/FPV flying
- Physics

- Mechanical Keyboards
- Computer Security
- Android