

Colt Darien

Experience

- September 2016–Present **Software Engineer, Xpanxion, (xpanxion.com).**
- Test Automation Architect for Fortune 500 Health Insurance Company:
 - Automated much of the maintenance of developer machines to give them more uptime
 - Wrote tests with Cucumber and java using Selenium
 - Worked with Atlassian tools (Jira, Bamboo, Confluence, etc) including the REST API
 - Designated "git helper": Many people came to me when they needed help with code repository

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 Advanced: Used extensively at Xpanxion and Anthem. Architected some of the Anthem testing suite
- Python Intermediate: Main language used in algorithms course at CSU
- REST Intermediate: (Atlassian/Jira specifically) interact with web resources to automate repetitive tasks
- Selenium Intermediate: Automation of Anthem website for testing purposes
- Sh/Bash/mksh Intermediate: Wrote basic scripts for on linux machines to do various tasks
- SQL Intermediate: Test data management for Anthem/Xpanxion

Computer skills

- Atlassian Intermediate: Worked with Atlassian tools REST api for minor Devops work
- Cloud Beginner: Briefly used AWS and Digital Ocean for projects at work
- Containers Beginner: LXC/LXD, Docker for personal use on home lab (more comfortable with LXC/LXD than docker, but have used both)
- "Hardware" Intermediate: B.S. Computer Engineering and personal projects allow for insight that other developers may not have
- Linux Intermediate: Familiar with 'apt' as well as 'apk' and 'pacman' package managers. Multiple bootloaders, multiple init systems, etc. Very comfortable with linux terminal and familiar with several distros
- VCS/Git Intermediate: Used 'git' and github/git labs for several projects

Non Professional Experience

Senior Design

2015–2016 **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)

Education

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

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 design 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
- Mechanical Keyboards
- Mountain Biking
- Computer Security
- Android