

# JACOB M. SHODD

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## EDUCATION

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### Westminster College

Bachelor's of Science in Computer Information Systems

Aug. 2013 - May 2017

## WORK EXPERIENCE

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### Security Engineer

Red Ventures

Feb. 2018 - Current

- Managed an AWS environment of 250 accounts, utilizing Terraform Enterprise as an Infrastructure as Code system
- Developed automated systems via Python and Golang to perform operations across all AWS accounts
- Designed, developed, and deployed highly available and scalable ECS applications using ECS Fargate
- Built out a HIPPA Compliant framework in AWS and migrated an existing production and staging environment to it
- Deployed software and Infrastructure using Terraform Enterprise, Jenkins, and Deployfish

### Operations Engineer

M\*Modal

May 2017 - Feb. 2018

- Created an internal web application using Golang to act as a reporting and alerting portal
- Implemented a Prometheus monitoring framework in Kubernetes clusters across several data centers
- Wrote, maintained, and utilized Python scripts to automate tasks and process data
- Deployed production code with Kubernetes and performed profile data migrations between databases

## PROJECTS

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### Gobot

Golang & AWS

<http://jacobshodd.com/project/goBot>

- Created a SlackBot to react to slash commands in a Slack community with 6,600 active users
- Deployed to Amazon's serverless Lambda system and is triggered through Amazon's API Gateway

### Guest Mapper

Golang & Neo4J

<https://github.com/jshodd/guestMapper>

- Created a REST API to interact with a graphing database to map my relationships with wedding guests

### Sigma Swiper

Python

<http://jacobshodd.com/project/sigmaSwiper/>

- Wrote an application to log guest entry by swiping student ID cards while checking against a guest list
- Built a custom touch screen raspberry pi kiosk for the program to run on, utilizing QT for the user interface

### Penetration Test

Senior Capstone

- Used tools like Nmap, Hydra, and Ettercap to test areas such as VNC, LDAP, and user password strength
- Wrote a custom python script using Scapy to capture VNC packets and display all of a target's keystrokes

## CERTIFICATIONS

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### AWS

Solutions Architect Associates, Developer Associate

### OSCP

In Progress

## SKILLS

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### Programming Languages

Golang, Python, Java, SQL, Bash

### Software & Tools

Nmap, Netcat, Burp Suite, GoBuster, SQLMap, Nikto