**ZACHERY THOMAS**

ZacheryThomas.com

ZacheryThomas12@gmail.com

**EDUCATION**

**Masters of Computer Science, Graduated: May 2018**

North Carolina State University, Raleigh, NC

**Major GPA = 3.70**

**Bachelors of Science in Computer Science, Graduated: May 2016**

North Carolina Agricultural and Technical State University, Greensboro, NC

**Major GPA = 3.94 Cumulative GPA = 3.79**

**RELEVANT SKILLS**

* Experience with Python, JavaScript, Java
* Worked with cloud service provider technologies: AWS (EC2, ElasticsearchService, S3, API Gateway, Lambda, Cloudfront), DigitalOcean Droplets
* Used Jenkins, GoCD, Docker and Ansible for testing, deployment and server orchestration
* Familiar with log / metric storage and display (ElasticSearch, Kibana, InfluxDB, Grafana)
* Worked in Windows, Mac OS and Linux (Ubuntu, CentOS) environments

**EXPERIENCE**

Cisco Systems Morrisville, NC

***DEVOPS ENGINEER*** Jan 2020 – Present

* + Managed CI/CD Pipeline (GoCD) for Webex Share, Room Phone and Desk Hub
    - 24/7 Available for commits. Used by 100+ developers in NC, CA, TX and Shanghai. Handles 30 Commits per day in largest pipeline. End to end test suite of 135 tests with up to 80+ test suites running in parallel.
    - Handles around 100,000 device reservations per quarter
    - Managed and modernized Ansible playbooks which allowed for uniform configuration and updates for our 20 build machines
    - Added ELK stack for Metrics, Log Aggregation and Alerting from pipeline build machines and microservices
  + Maintained physical device labs that are used for end-to-end testing
    - Originally had single lab in Morrisville, NC. Integrated secondary lab in Shanghai in collaboration with sister site to increase redundancy
    - Increased the total number of reservable devices from ~250 to ~360 in 2020
    - Automated previously manual device recovery procedures with Microservice. Saved days of developer manhours in 2020
    - Automated process for adding new devices to lab network using Ansible
* Lead move from Rancher 1.0 to OpenShift (Managed Kubernetes cluster) for pipeline and developer Microservices within 2 months
  + Moved 29 Microservices in total while ensuring services functioned as intended, meet requirements for new cluster and were able to be automatically deployed/updated with CI/CD
* Mentor to New Hire and Intern. Worked closely to determine tasks and guide learning
  + New Hire helped run daily pipeline operations and implement improvements. Aided in move to Kubernetes, lab management tasks
  + Intern implemented login feature for device reservation microservice

Cisco Systems Morrisville, NC

***SOFTWARE ENGINEER*** Mar 2019 - Dec 2019

* + Used Angular and NodeJS to develop customer facing web apps
  + Developed code review reminder tool for GitLab using NodeJS and MongoDB

Cisco Systems Morrisville, NC

***SOFTWARE ENGINEER*** Aug 2018 - Mar 2019

* Prototyped and developed log and metric aggregation service for monitoring applications and servers using ElasticSearch for event storage and ElastAlert for alerting to PagerDuty
* Developed CI/CD pipeline with BitBucket, Jenkins, Ansible and Docker to quickly build, test and deploy code changes to remote servers

Cisco Systems Morrisville, NC

***SOFTWARE ENGINEERING SUMMER INTERN*** May 2016 - Aug 2018

* Worked with team of interns to create internal site that tracks CI deployment time using AWS services
  + Used S3, ElasticsearchService, API Gateway, Lambda
* Used Jenkins and Gerrit REST APIs to update JIRAs upon completion of Jenkins jobs
* Developed tools for automating Kibana setup and log file migration between Docker Containers
* Worked with team to create site which tracks trends in code coverage using Nginx and Postgres containers

LGS Innovations Floram Park, NJ

***CYBER SECURITY RESEARCH INTERN*** May - Aug 2015

* + - * Researched feasibility of fingerprinting Internet of Things (IoT) network data from encrypted traffic using Python based, open-source tool called Pacumen
      * Used Python library, Scapy, and Wireshark to examine and modify information in packet capture files for anti-fingerprinting

NASA Jet Propulsion Lab (JPL) Pasadena, CA

***RADAR SCIENCES SUMMER INTERN*** May - Aug 2014

* + - * Analyzed simulated SAPHIR RADAR data using MatLab to determine rainfall rate within cloud formations

Plotted visual representations of RADAR information

Developed classifier for rainy sky using Principal Component Analysis

**AWARDS & ACHIEVEMENTS**

* + - * **Leadership role** under the Tech and Automation pillar for **“Early in Career”** group within Cisco (2020)
      * **One of Three top Final Presentations** in NCSU Grad level DevOps course (CSC 519) **out of 16 teams** (2018)
      * NCSU GEM Fellowship: Full Tuition and Fees (2016)
      * North Carolina A&T State University Lewis and Elizabeth Dowdy Full Academic Scholarship (2012)
      * NCAT University Dean’s List (Fall 2012 – Spring 2016)