



## OBJECTIVE

*Vision-driven change agent with career-long record of IT support, system administration, information security, and technical leadership for leading mission driven organizations*

Proven talent for aligning business strategy and objectives with established support, security, and engineering paradigms to achieve maximum operational impacts with minimum resource expenditures. Efficiency-focused thought leader with expertise spanning system administration, endpoint and server security, compliance and posture management, hands-on and remote support, cross-functional team participation, complex problem-solving and troubleshooting, cluster and cloud computing, process optimization, customer service, and technology solutions. Exceptionally dedicated and precise professional with keen interpersonal, communication, and organizational skills.

## PROFESSIONAL EXPERIENCE

PLANNED PARENTHOOD CLINICAL HEALTH NETWORK, REMOTE, Jun 2023 – Present

### SENIOR CLOUD ENGINEER

- Directed the development of a high-performing cloud engineering organization that improved IT efficiency by 30% post-Roe v. Wade for 15 Planned Parenthood affiliates across 19 states.
- Configure, manage, validate, test, document, troubleshoot, and maintain AWS Linux and Windows servers, storage, database, and network resources using direct configuration and abstraction automation, and orchestration tools such as Terraform and CloudFormation.
- Deliver 3rd and 4th tier support to Planned Parenthood affiliates, resolving complex networking and device issues that enhanced operational efficiency in a multi-region, multi-gigabit-per-second hybrid AWS network environment. Issues include site-to-site IPsec VPN troubleshooting, carrier routing issues, wireless network issues, and peripheral device configuration.
- Lead security hardening initiatives, configuring IAM roles, policies, and encrypted storage for AWS, using Packer, Terraform, and Ansible, providing automated secure infrastructure builds and ensuring consistent application of security and compliance policies.
- Work cross-functionally with other teams to develop and maintain solutions to support patient care, business services, security and compliance, and ensure appropriate use of IT resources across the organization. Recent projects include partnership with Information Security team on rollout of Palo Alto Cortex XDR, CASB Cloud Security, and SaaS Security Posture Management.

BETTERHEALTH A PLANNED PARENTHOOD PARTNERSHIP, REMOTE, Sep 2020 – Jun 2023

### SENIOR CLOUD ENGINEER

- Directed the development of a high-performing cloud engineering organization to move Planned Parenthood Affiliates located throughout the United States to the Epic Electronic Health Record. This multi-year, multi-million-dollar project has directly led to patients in Ohio being seen 8 days sooner for abortion care and a decrease in 3-4 hours of average abortion visit time across all affiliates using Epic.
- Provisioned and configured AWS Linux and Windows servers, storage, database, and network resources using direct configuration and abstraction tools, including Terraform, CloudFormation, and Ansible, leading to a 20% reduction in engineer time spent.
- Delivered 3<sup>rd</sup> and 4<sup>th</sup> tier support to Planned Parenthood affiliates to resolve complex networking and device problems in a multi-region, multi-gigabit-per-second AWS network environment, closing over 1000 tickets during my tenure.
- Worked cross-functionally with other teams to develop and maintain solutions to support their work and ensure appropriate use of IT resources. Projects included developing in-house medical image processing software, SFTP data transfer integrations with lab and finance vendors, monitoring solutions to track the health and performance of systems, and rollout of Atlassian suite for knowledge base and ticket system.

- Mentored junior staff in cloud security principles and DevSecOps practices, fostering cross-team collaboration to integrate engineering and security best practices throughout the organization.

COLUMBIA UNIVERSITY, NEW YORK NY, Nov 2017 – Apr 2020

### **SYSTEMS ENGINEER**

- Maintained, documented, patched, and upgraded all hardware and software on approximately 200 servers in the Business School.
- Acted as primary maintainer of various servers and platforms, such as CAS Single Sign On System (SSO), Azure DR environment, Drupal CMS, VMware vSphere, DHCP, Zenoss Monitoring, and others.
- Coordinated within and across teams to plan and execute ongoing projects. Projects included Gitlab CI/CD for CAS deployments, additional VMware vSphere hosts, SVN to Git Migration, and MediaWiki to Confluence migration.
- Participated in the engineering and evaluation of new installations and upgrades of hardware and software. Projects included staging server for CAS SSO in Azure, deployment of AWS CloudFront for static web assets, and vSphere and vCenter upgrades.
- Maintained Configuration Management workflows on Linux servers using Puppet. Setup of a code approval process in GitLab for all changes.
- Provided 3<sup>rd</sup> tier support to the Client Support Group to resolve complex end user issues.
- Participated in ongoing multi-year, multi-million-dollar efforts to integrate all Business School IT infra and personnel into Columbia University IT (CUIT). Projects included Drupal migration to CUIT's CI platform, Access and Data Center network re-architecture, and integration of IDM functions between central Columbia University and Business School AD, HRMS, and SSO systems.

GNS HEALTHCARE, CAMBRIDGE MA, Jun 2015 – Aug 2017

(Rebranded as Aitia Bio, January 2023)

### **IT SUPPORT SPECIALIST**

- Worked to troubleshoot client- and server-side software and hardware issues; provide explanations and resolutions to end users virtually/in-person to users at all company levels, including C and D-level executives; Served as an escalation point for Junior IT Support Specialist with end-user incident resolution.
- Installed and deployed new AWS-based servers utilizing EC2, S3, Glacier, VPC, RDS, and Redshift; VMware virtualized; and local Linux servers with software including Apache, Tomcat, Jenkins, SSL certificates, Java, and Docker.
- Managed LDAP and SaaS user accounts and associated permissions for all company users.
- Utilized configuration management on Linux servers with Ansible to automate software installation and configuration.
- Triaged issues with cloud compute applications, services, and the installation and configuration of new services; gained experience with parallel/cluster computing, load balancing and HA.
- Authored and maintained accurate documentation for a wide variety of technology and services within the Confluence-based knowledge base.
- Coordinated vendor management activities with the IT Manager and CIO, including evaluations, implementations, contract renewal, and support requests.
- Collaborated with other IT team members to execute projects using Agile and Scrum methodologies. Projects included moving on-prem services into AWS, email migration, physical office move, server security and automation, and HITRUST CSF (<https://hitrustalliance.net>) certification effort.
- Delivered security awareness trainings for new hires.

MIT INFORMATION SYSTEMS AND TECHNOLOGY, CAMBRIDGE MA, May 2013 – May 2015

### **IT HELP ANALYST II**

- Communicated technical understanding of a wide range of issues and their resolution to non-technical users.
- Provided tier 1 email, phone, and walk-in technical support for MIT students, faculty, staff, and affiliates.
- Delivered tier 2 support for Education Systems, including the Stellar CMS, Google Apps for Education, and Confluence Wikis; escalated as appropriate.
- Coordinated and provided tier 1 and 2 support for cable TV, phone, and Internet in MIT dormitories and independent living groups (ILGs); escalated tier 3 network issues.

- Authored and maintained accurate documentation for a wide variety of technology and services within the MIT Confluence-based knowledge base.
- Participated in strategic community outreach programs, including laptop anti-theft registrations, IT Partners conferences and email lists, and start of year and Campus Preview events for new students.
- Facilitated the training and mentoring of new student workers in the Call Center, Walkins, and Residential Computing spaces to promote swift onboarding and high productivity.

STUDENT COMPUTING SERVICES AT HOFSTRA UNIVERSITY, HEMPSTEAD NY, [REDACTED]

#### **TECHNICAL SUPPORT SPECIALIST**

- Demonstrated expertise as first-line technical support for Hofstra's 10,000 students.
- Provided in-person and remote support to students who contacted the Helpdesk.
- Ensured smooth operation of student Macintosh computers, Windows computers, smartphones, as well as student computer lab and classroom workstations.
- Diagnosed problems with wireless access points, printing services, Blackboard CMS, AD, and web service logins; escalated as appropriate.
- Triageed issues with Google Apps for Education services.
- Resolved issues including password resets, disabled login accounts, print release issues, MS Office Suite questions and errors, problems with web services, installing drivers and software, device network registrations, and connectivity issues.

## **RELEVANT PROJECTS**

CLUSTER AND CLOUD COMPUTING

#### **AMAZON WEB SERVICES**

- Experience with EC2, ECS, Fargate, S3, Glacier, IAM, VPC, RDS, Redshift, and Workspaces.
- Setup and maintenance of individual servers and applications, as well as HA services and HPC clusters.
- Setup and maintenance of IAM policies, roles, and AWS IAM Identity Center Single-Sign-On.
- Set up Vault (<https://vaultproject.io>) in high-availability and to use AWS IAM backend.
- Maintain a personal AWS account with VPN tunnel to home, and Route 53 DNS domains for personal services.
- Experience with AWS Lambda for creating simple S3 data pipeline to integrate with an external vendor's application, and Lambda@Edge for serving static web assets through Cloudfront.
- Devised a container-based microservices infrastructure for CU Business School's Community Mailing List application that reduced system complexity and increased availability.
- Automated security configurations and policy compliance checks for AWS infrastructure using Terraform and CloudFormation, aligning with HIPAA/SOC 2 frameworks to protect patient data.
- Recent experience piloting AWS Security Hub for single pane of glass of security checks and alerts, enhancing collaboration between engineering and security teams.

#### **STARCLUSTER** (<https://star.mit.edu/cluster>)

- Experience configuring and submitting Sun Grid Engine (SGE) jobs.
- Spun up and upgraded clusters and Load Balancers.
- Built, tested, and implemented a new server AMI based on new Ubuntu 16.04 LTS.
- Performed rudimentary plugin writing utilizing foundational Python skills.

CMS/WEB DEVELOPMENT

#### **DRUPAL**

- Collaborated with IS&T students and staff to deploy a new website for the Residential Computing team in the IS&T Helpdesk, with features including ticket submission web forms, dynamic content from System Status page, and CSS/JavaScript feature slideshow.
- Configured Request Tracker queues with Perl scripts to parse mail headers and body of web form submissions to set custom ticket system fields. Received an MIT IS&T Spotlight Award for work on the site.

- Primary systems maintainer of Columbia Business School's Drupal environment, including Varnish, Couchbase, and F5 GTM/LTM load balancing. Migrated Drupal sites into CUIT's Drupal-as-a-service platform, including work with CUIT to setup an HA database and memcache solution for that platform.

#### DEVOPS

##### **MACATHENA** (<http://github.com/macathena/macathena>)

- Worked to port MIT's Athena computing platform to macOS, including the Python automounter, *moira* utilities, and a customized login greeter.
- Recent experience with CI/CD pipeline integration with GitHub to autobuild new commits and run regression and unit tests.

#### CI/CD

- Setup CI/CD pipeline integration for MacAthena project (above).
- Experience with GitLabCI (<https://about.gitlab.com/product/continuous-integration/>) at CU to build CAS SSO Java WAR file with Maven, and deploy the WAR file in an automated fashion on dev, stag, and prod server infrastructure, saving at least an hour per deployment.

#### CONTAINERS

- Containerized GitLabCI on Docker with environment isolation for dev, stag, and prod builds.
- Maintained ECS development containers for developers to have isolated environments to install Python, R, and other packages in while maintaining HITRUST compliance in production with restricted software installation rights
- Recent experience with AWS Elastic Kubernetes Service and Kubernetes workshop.

## EDUCATION AND CREDENTIALS

### AVIATRIX CERTIFIED ENGINEER – MULTI-CLOUD NETWORKING PROFESSIONAL, JAN 2023

Certification Number: 2020-7869

### AVIATRIX CERTIFIED ENGINEER – MULTI-CLOUD NETWORKING ASSOCIATE, SEP 2020

Certification Number: 2020-7869

### AWS CERTIFIED SOLUTIONS ARCHITECT - ASSOCIATE, DEC 2019

Validation Number: 15Q6RNGCNJREQ7WE

### SUMOLOGIC PRO USER AND POWER USER CERTIFIED, MAY 2019

Certification IDs: A58A-5735-946F-F40D, 150E-316A-1ED6-3E65

### SOFTWARE CARPENTRIES CERTIFIED INSTRUCTOR ([HTTPS://CARPENTRIES.ORG/ABOUT/](https://carpentries.org/about/)), DEC 2018

Taught Python, Git, and bash to graduate students as part of the Columbia University Research Computing Foundations program.

### COURSEWORK COMPLETED TOWARD BACHELOR OF SCIENCE IN EDUCATION (B.S.Ed.) IN MUSIC EDUCATION,

Hofstra University, Hempstead NY

## ADDITIONAL INFORMATION

**Technical Proficiencies:** Azure, AFS, Apache, bash, cron, DHCP, DNS, Docker, ELK/EKK, GlobalProtect, Github, Google Workspace, Kerberos, Linux, LDAP/OpenDJ, macOS, NFS, NGINX, OpenVPN, Prisma SD-WAN, Prisma Access, Python, SSH, Splunk, Sendmail, systemd, SysVinit, Ubuntu, VMWare, WordPress, X.509 certs

**Hobbies:** Singing, Playing Trumpet, Tinkering with home automation and the Internet of Things, Volunteer Music Teacher, Member of Barnard-Columbia Choir and Barnard-Columbia Chamber Singers.