

KEEGAN CRUTE

Detroit Metropolitan Area

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SUMMARY

Systems & Cloud Support Engineer with experience operating across complex, cross-platform environments involving identity, automation, security, and collaboration systems. Strong background in Azure AD/Entra ID lifecycle management, Microsoft 365 administration, DNS/DHCP fundamentals, and virtualization basics (Hyper-V/VMware).

Experienced in troubleshooting authentication and MFA issues, cloud service performance problems, and cross-stack failures spanning identity, networking, and applications. Designed and built Python and REST API automation to improve reporting, configuration validation, and operational scale across 300+ organizations. Recognized for rapid learning, deep technical troubleshooting, and authoring clear documentation and SOPs that improve reliability and efficiency.

EXPERIENCE

Security, Systems & Cloud Support Engineer

Bullfrog Group, LLC — Troy, MI | Sep 2024 – Nov 2025

Supported large-scale, cross-platform cloud environments across identity, endpoint security, cloud platforms, and systems infrastructure, serving 300+ organizations. Provided Tier 2/3 support across Azure AD/Entra ID, Microsoft 365, Windows/Mac/Linux endpoints, and cross-stack cloud access issues.

- Diagnosed user provisioning and identity lifecycle issues, MFA/SSO authentication failures, conditional access and permission conflicts, certificate/authentication errors, and cloud login issues across Azure AD/Entra ID, Microsoft 365, and connected SaaS applications.
- Deployed and maintained Cisco Secure Endpoint (EDR) and Umbrella Roaming Client; performed DNS-layer investigations, reviewed Umbrella security policies, and remediated endpoint and network access issues.

- Supported virtualization-adjacent issues, including Hyper-V VM access, RDP session troubleshooting, GPO/OU alignment, and Linux-based EDR and automation agent deployments.
- Delivered 60+ cloud application deployments (Webex, Secure Endpoint, Umbrella), including Azure AD integration, RBAC and permission mapping, device provisioning, lifecycle configuration, CRM integration, and IT administrator/end-user onboarding.
- Conducted 60+ structured training sessions for IT administrators and end users covering cloud platforms, identity integrations, and administration best practices.
- Designed and built a production-grade Python automation toolkit supporting large-scale Webex environments, automating PSTN discovery, license and overage auditing, OAuth token lifecycle management, configuration validation, and structured data extraction across 300+ organizations.
- Managed a Linux (Ubuntu Server) automation host running cron-driven reporting pipelines and OAuth-authenticated API jobs supporting customer success, engineering, and accounting teams.
- Authored SOPs, runbooks, onboarding workflows, and troubleshooting guides spanning identity integrations, cloud administration, endpoint security, and automation processes.

Help Desk Specialist (Tier 1–2)

Bullfrog Group, LLC — Troy, MI | Jun 2024 – Sep 2024

- Provided Tier 1–2 support for identity, endpoint, networking, and cloud access issues across diverse customer environments.
- Resolved DNS/DHCP conflicts, VPN failures, certificate and authentication errors, and Microsoft 365 access issues.
- Supported user onboarding, account lifecycle management, device provisioning, and cloud application setup.
- Improved internal documentation and troubleshooting procedures to increase team efficiency and consistency.

Customer Service & Operations Roles

Various Employers — 2014–2024

High-volume customer-facing experience across hospitality, retail, and fitness environments. Developed strong communication, reliability, and service-oriented skills that underpin my approach to technical support, troubleshooting, and customer engagement.

- Handled daily customer interactions, issue triage, and service escalations

- Trained new staff on procedures, tools, and task workflows
- Maintained accuracy and reliability in fast-paced environments
- Built strong communication, de-escalation, and problem-solving skills

CORE SKILLS

Systems & Cloud:

Windows Server (foundational), Azure AD / Entra ID, Microsoft 365 administration, identity lifecycle and access troubleshooting, cloud application deployment and integration (Webex, Microsoft 365), virtualization fundamentals (Hyper-V, VMware), VM provisioning basics, Linux fundamentals

Networking:

DNS, DHCP, TCP/IP, NAT, VPN, DNS-layer security and troubleshooting (Cisco Umbrella)

Security:

Cisco Secure Endpoint (EDR), Cisco Umbrella (Roaming Client, SIG-A/E), Cisco Secure Email Threat Defense, log analysis, MFA and SSO troubleshooting (Duo, Entra ID)

Automation:

Python scripting, REST APIs, OAuth flows, JSON, Git/GitHub, Bash (Zsh), PowerShell fundamentals

Operational:

SOP and runbook creation, customer and administrator training, cross-team collaboration, cross-platform cloud troubleshooting, systems thinking

AUTOMATION & ENGINEERING PROJECTS

Python Automation Toolkit (Webex)

Designed and built a production-grade Python automation toolkit supporting large-scale Webex environments. Automated reporting, OAuth token lifecycle management, identity and authentication data extraction, license and overage analysis, PSTN discovery, and configuration validation across 300+ organizations.

EDR & DNS Security Deployment

Deployed and maintained Cisco Secure Endpoint (EDR) and Cisco Umbrella Roaming Client; performed DNS-layer investigations, validated security blocks, and supported policy application and troubleshooting across endpoint and network access layers.

Cloud Identity Troubleshooting Lab

Diagnosed identity and authentication issues including user provisioning and sync failures, MFA/SSO errors, DNS misconfigurations, permission conflicts, and certificate-related issues affecting cloud login flows.

CRM + Cloud Automation

Built internal Zoho CRM → RevIO automation using API calls and Deluge scripting to streamline customer onboarding, account provisioning, and operational data flow.

Browser Workflow Extension

Published a Chrome/Firefox extension enabling click-to-dial functionality and workflow automation for customer service and sales teams.

Linux & Virtualization Lab

Built Linux (Ubuntu Server) and Windows virtual machines using VMware and VirtualBox to practice identity integration, endpoint security deployment, service hosting, and systems troubleshooting.

CERTIFICATIONS

Security & Cloud Security:

- Cisco Secure Endpoint Deployment Stage 2
- Cisco Umbrella MSSP Console Onboarding
- Cisco Security Essentials Stage 1

Systems, Networking & Infrastructure:

- Cisco Meraki Network Associate (CMNA)
- Cisco AIOps Stage 1
- Webex Control Hub Professional
- Webex Contact Center Expert
- Cisco Collaboration SaaS

Customer Experience & Service Management:

- Cisco Customer Success Manager
- ITIL v4 Foundation

Data, AI & Modern IT Foundations:

- Cisco AI Data Fundamentals

EDUCATION

Associate of Applied Science — **Cybersecurity**

Oakland Community College | 2022–2024