

CASON MILES

Programming & Integration Specialist · Physical Security, Infrastructure & AI

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SUMMARY

Programmer and integrator who works across the full technology stack: enterprise physical security platforms, server and network infrastructure, cloud services, AI, and automation tooling. Specializes in enterprise video: camera estates, recording infrastructure, and integrating AI detection into the platforms that run them. Programs, integrates, and services access control, video management, intrusion, and AI camera systems for Fortune 500, industrial, healthcare, government, and higher-education clients, including global multi-site estates. Comfortable owning any system in the stack, from access controllers and recording servers to virtualization clusters, cloud infrastructure, and automation pipelines.

CORE SKILLS

Video & AI: Milestone XProtect · Genetec Omnicast · Avigilon Unity Video & Alta Cloud · March Networks · ExacqVision · Hanwha · Axis · AI analytics integrated into customer systems across VMS platforms · RTSP / ONVIF · AI detection built into VMS events, rules, and timeline

Access & Intrusion: Lenel OnGuard & Elements · Genetec Synergis · Avigilon Unity Access & Alta Cloud · Bosch RPS (Radionix G Series)

Cloud & Hybrid: Oracle Cloud Infrastructure · Microsoft Azure · Cloudflare Zero Trust · cloud-hosted security platforms · hybrid cloud-to-on-premises integration

Infrastructure: VMware vSphere/ESXi/vCenter · Proxmox · Docker · Windows Server & Active Directory · Linux · Veeam backup & replication · iSCSI SAN storage · Dell PowerEdge & iDRAC

Networking: Cisco Layer 3 switching & routing · VLANs & network segmentation · firewall policy · OPNsense (IDS/IPS) · Ubiquiti/UniFi

Automation & Dev: Python · PowerShell · n8n · Home Assistant · local LLM/AI integration · AI-assisted development · WordPress · Graylog/OpenSearch

EXPERIENCE

ATS Integrated Solutions · Louisville, KY · enterprise physical security integrator Aug 2025 – Present
Security Specialist Sep 2026 – Present
Security Technician Aug 2025 – Sep 2026

- Deploy and program AI camera systems: AI-driven detection and alerting integrated into enterprise VMS platforms.
- Program, install, and service enterprise video surveillance, access control, and intrusion systems end to end, for clients including Brown-Forman, Corning, University of Louisville, and Eaton.
- Provision and configure server infrastructure for large camera systems, including high-capacity video-recording storage servers, and work directly with client IT departments on system integration.
- Support global multi-site video infrastructure, including Brown-Forman's estate with a Milestone recording server at every site worldwide, from Louisville to Tokyo and Milan.
- Provide remote system management and programming for service-contract customers, act as the remote programming escalation for ATS and subcontracted field technicians.
- Program intrusion arming schedules across client estates, and built a Python pipeline that turns Bosch panel exports into a manager-ready Excel workbook for a 22-site financial-services client, cutting monthly reporting time roughly in half.

Webmaster (Contract) · City of Hurstbourne Acres, KY Nov 2025 – Present
Sole administrator of the city government's official website ([hurstbourneacresky.gov](https://www.hurstbourneacresky.gov)): content publishing, hosting, domain, and DNS for a .gov property.

AV Installation Specialist · Dr. Stereo, Richmond, KY Feb 2024 – Jun 2025
Designed and installed custom audio-visual, network, and smart-automation systems for residential and commercial clients (URC Total Control certified, Levels 1 & 2), including a 25-display TV-over-IP system for the Millstone Social sports bar.

TECHNICAL PROJECTS · AI VIDEO & HOME LAB

Multi-Camera AI Detection on Milestone XProtect

- Deployed a GPU-accelerated object detection system against live RTSP feeds from a six-camera estate, classifying people, vehicles, and animals.
- Integrated it into Milestone XProtect end to end: event definitions and rules that turn each detection into a labeled, click-to-playback bookmark, plus annotated video republished into the VMS as a recordable camera, so results land where operators already work.
- Tuned the event logic so an alert fires once per new object and only while it is moving, which stopped parked vehicles flooding the feed, and traced the deployment ceiling to host RAM rather than the GPU.

Home Lab & AI Operations

- Designed and operate a multi-agent AI system across a six-machine fleet: a persistent knowledge graph, scheduled automations, and live control of the homelab.
- Operate an enterprise-style home lab run like production: VMware vSphere/vCenter on Dell PowerEdge, a 30 TB iSCSI SAN, 40+ Docker services, OPNsense IDS/IPS, Veeam backups, and Graylog log ingestion with GeoIP threat mapping.
- Built an AI-powered surveillance system integrated with whole-home automation (Home Assistant + URC), plus local LLM services and n8n automation pipelines.

Hybrid Cloud Infrastructure

- Joined an Oracle Cloud instance to the on-premises network over a Cloudflare Zero Trust overlay: containerized services and a self-hosted PaaS in the cloud, managed from on-premises, with the cloud host isolated in its own DMZ VLAN behind dedicated VPN egress.
- Firewall policy is one-way by design: management reaches out, and the cloud host holds no route back inside. Also evaluated Microsoft Azure for the off-site tier: Windows Server VMs, Azure Backup, and Azure Arc against on-premises vCenter.

CERTIFICATIONS · 17 TOTAL, 11 EARNED IN THE FIRST YEAR AT ATS

Radionix G Series Expert (2026) · LenelS2 OnGuard (2026) · Genetec Synergis & Omnicast (2026) · NFPA 70E (2026) · Milestone MCIT & MCDE (2025) · LenelS2 Elements (2025) · ESA Certified Alarm Technician (2025) · Avigilon Unity Access, Unity Video & Alta (2025) · CompTIA Network+ (2025) · OSHA-10 (2025) · In progress: Cisco CCNA · Microsoft Azure AZ-900

EDUCATION

Eastern Kentucky University · Richmond, KY May 2025
B.S., Cyber Systems Technology (Minor: Informatics) · GPA 3.59 · Dean's List · A.A.S., New Technology (Computer Electronics focus)