

TIMOTHY ALLEY

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Resume Summary

Hands-on technician with 16+ years of experience in electromechanical repair, embedded systems, and software deployment across large fleets of automated kiosks and retail devices. I specialize in troubleshooting the intersection of hardware, software, and networking—from replacing mechanical components to installing custom operating systems, configuring device drivers, and performing remote diagnostics using tools like Kaseya. My background includes upgrading operating system images on 350+ Redbox kiosks, configuring static IP addresses and cellular router firmware, reviewing system logs for root-cause analysis, and resolving field hardware/software integration issues. I also bring a strong mechanical foundation from nine years in commercial printing, where I maintained high-speed automated equipment, followed safety procedures, and solved problems under pressure. I am a curious, self-directed learner with ongoing study in networking, Linux, and IT fundamentals, supported by home lab experimentation and continuous hands-on practice. I am now focused on applying my technical troubleshooting experience to data center, infrastructure, or operations environments where reliability, documentation, and systematic problem solving matter.

Skills

Electromechanical & Hardware Skills

- Electromechanical troubleshooting: diagnosing sensors, motors, wiring, power supplies, and mechanical assemblies.
- Component-level repair: replacing PC components, repairing or replacing wiring harnesses, and adjusting mechanical systems.
- Kiosk and embedded hardware: Redbox, Amazon Locker, ecoATM, and similar automated retail systems.
- PC and device assembly: building, upgrading, and maintaining systems, including gaming rigs.

Test Equipment & Diagnostic Tools

- Digital multimeters: extensive field experience with Fluke 117 auto-ranging DMMs; trained coworkers on safe probing techniques and measurement workflows.
- AC clamp meters: measuring current draw on live circuits without disconnecting equipment.
- Specialized test leads: mini clamp leads for hands-free grounding and safe probing on live boards.
- Network cable testers: continuity, pinout, and cable integrity verification.
- Tone generator and probe: tracing and identifying cable runs.
- Oscilloscopes: classroom and home lab waveform analysis.
- Function generators: home lab signal generation for circuit testing.
- Diagnostic software tools: Kaseya remote access, log review, and system-level testing.

Operating Systems & Software Deployment

- OS installation and imaging: deployed custom OS images and upgraded operating systems on 350+ kiosks.
- Driver installation: cameras, payment modules, sensors, and PC hardware.
- Firmware updates: cellular routers, kiosk components, and embedded devices.
- Embedded Linux familiarity: CLI basics, log review, and system behavior analysis.

Networking & Connectivity

- Network configuration: static IPs, DNS, gateway settings, and connectivity validation.
- Cellular router management: SIM swaps, carrier migrations, and modem firmware.
- Remote diagnostics: Kaseya remote access to 350+ kiosks.
- Basic network troubleshooting: modems, routers, NICs, and connectivity issues.

Troubleshooting & Diagnostics

- Log analysis: identifying hardware faults, driver issues, and application errors.
- Hardware/software integration: diagnosing failures across mechanical, electrical, and software layers.
- Systematic problem solving: structured, step-by-step isolation of faults.

Safety & Team Leadership

- Safety Lead: nominated twice; promoted safe work practices, MSDS compliance, and electrical safety.
- Peer training: taught coworkers DMM use, grounding techniques, and troubleshooting fundamentals.
- Procedure compliance: lockout/tagout, lifting safety, and powered equipment handling.

Work Experience

Kiosk Technician | Hillman Group

March 2025 – Present

- Support installation, maintenance, software deployment, networking, and troubleshooting for automated retail and self-service kiosks, including Minute-Key machines, Tag engraving machines, and ecoATM machines.
- Resolve HAL and driver issues and support kiosk software functionality.
- Configure network settings, including static IP addresses and DNS, to restore and maintain kiosk connectivity.
- Perform SIM swaps and carrier migrations.
- Troubleshoot electromechanical assemblies across motors, sensors, payment modules, PC hardware, wiring, lockers, key-cutting systems, and device intake components.
- Document work, track service activity, and support issue resolution.
- Communicate with customers, coordinate escalations, and follow documented procedures for upgrades and safety-critical tasks.
- Maintain safe work practices, including electrical safety and MSDS compliance.

Key Skills: Field service operations, automated retail kiosks, Minute-Key machines, Tag engraving machines, ecoATM machines, SIM swaps, electromechanical troubleshooting, PC hardware repair, customer service, safety compliance.

Field Service Technician I | CPI

October 2024 – April 2025

- Provided field service, preventative maintenance, and customer support for company electromechanical equipment across assigned client sites.
- Serviced, upgraded, and performed preventative maintenance on electromechanical equipment to support reliable client operations.
- Traveled daily to customer locations across an assigned territory, including occasional overnight travel, to complete service calls within contract response times.
- Partnered with branch employees and client contacts to diagnose issues, coordinate service needs, and maintain a customer-first service experience.
- Maintained balanced vehicle stock parts inventory to support timely repairs and reduce service delays.
- Participated in extended-hours coverage and on-call duty to support urgent customer service requests.
- Protected company-issued assets, including service vehicle, tablet, mobile phone, tools, and parts inventory.

Key Skills: Electromechanical troubleshooting, preventative maintenance, field service support, customer service, inventory control, contract response compliance, iOS, Microsoft Office, Windows OS.

Field Service Technician II | Redbox Automated Retail

February 2010 – May 2022; December 2022 – July 2024

- Supported installation, maintenance, software deployment, networking, and troubleshooting for large fleets of automated retail and self-service kiosks, including Redbox kiosks, ecoATM machines, Pokémon card kiosks, Amazon Lockers, and KeyMe kiosks.
- Performed large-scale software rollouts and operating system upgrades across 350+ Redbox kiosks.

- Resolved HAL and driver issues and supported kiosk software functionality.
- Used Kaseya for remote diagnostics, log review, testing, and troubleshooting support.
- Configured network settings, including static IP addresses and DNS, to restore and maintain kiosk connectivity.
- Upgraded cellular router firmware and completed SIM swaps and carrier migrations.
- Troubleshoot electromechanical assemblies across motors, sensors, payment modules, disc-handling systems, PC hardware, wiring, lockers, key-cutting systems, and device intake components.
- Used Remedy and ServiceMax ticketing systems to document work, track service activity, and support issue resolution.
- Communicated with customers, coordinated escalations, and followed documented procedures for upgrades and safety-critical tasks.
- Maintained safe work practices, including electrical safety and MSDS compliance.

Key Skills: Field service operations, automated retail kiosks, ecoATM machines, Pokémon card kiosks, Amazon Lockers, KeyMe kiosks, embedded Linux, OS upgrades, remote diagnostics, Kaseya, static IP and DNS configuration, cellular router firmware, SIM swaps, electromechanical troubleshooting, PC hardware repair, Remedy, customer service, safety compliance.

Medical Equipment Repair Technician | EMSAR

May 2022 – December 2022

- Worked independently to inspect, troubleshoot, and support repair needs for Emergency Medical Services equipment while maintaining strong customer service and operational accountability.
- Assessed problems with EMS equipment independently and documented service needs using ServiceMax work ticket software.
- Managed parts, tools, travel expenses, and vehicle responsibilities while supporting field service operations.
- Delivered professional customer service to clients and helped maintain positive client relationships.
- Maintained an exemplary driving record while operating a company vehicle for service-related travel.

Key Skills: EMS equipment support, field service, troubleshooting, ServiceMax, inventory tracking, expense tracking, customer service, company vehicle operations.

Commercial Printing — Litho Craft Inc.

Printing Press Feeder / Operator | 2000 – 2009

- Set up and tuned printing presses for registration and quality.
- Prepared materials including paper loading and ink mixing.
- Monitored high-speed press operation up to 10,000 sheets per hour.
- Performed mechanical adjustments on rollers, feeders, and tension systems.
- Practiced strict safety procedures including lockout/tagout and chemical handling.
- Operated forklifts and pallet jacks.
- Handled shipping and receiving tasks.
- Worked as part of a production team to meet deadlines.

Education

- GED — Edmonds Community College, 2010
- Electronics Studies — Lake Washington Institute of Technology, 2009–2013; coursework toward AA
- IT Help Desk Certificate — Edmonds Community College, 2014–2015
- Ongoing self-directed learning — IT, networking, Linux, home lab projects, audiobooks, and AI-assisted study.

Personal Troubleshooting Philosophy

If you do not take the time to understand how a system works, you will not be able to repair it. Troubleshooting starts with learning the machine—its startup sequence, normal behavior, and job-by-job workflow. Once the expected order of operations is clear, the right questions follow: What is working? What is not working? What changed? Answer those, and the failure usually reveals itself.

Reliability Mindset: I build systems that survive failure. Sixteen years of field service taught me to engineer with backups, redundancy, and recovery in mind, using RAID-1 storage, GitHub version control, cloud backups, and

isolated development environments to support stability, rollback capability, and disaster-resistant operation.