ANDREW ALLENDER

SOFTWARE ARCHITECT | ENTERPRISE AUTOMATION | SECURITY-FOCUSED ENGINEERING

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PROFESSIONAL PROFILE

Hands-on software architect and enterprise IT engineer with 20+ years of experience building operational tools, integrating business systems, and delivering customer-facing technical solutions. Created a company-wide PowerShell help desk automation platform and engineered controlled AudioCodes SmartTAP data exports for highly sensitive financial communications in a regulated, audit-intensive environment. Combines software development, Windows/Linux infrastructure, troubleshooting, stakeholder collaboration, and practical independent AI/identity engineering.

TECHNICAL STRENGTHS

Software & integration: PowerShell, Python, SQL/SQL Server, Visual Basic/VBScript, Java, REST APIs, XML, CSV processing, scripting, logging, diagnostics, testing and troubleshooting.

Security & infrastructure: Identity/account workflows, policy diagnostics, auditability, access controls, VMware/vSphere/ESXi, Hyper-V, Windows Server, Linux/Ubuntu, DNS/DHCP, network segmentation, virtualization and backup.

Delivery & applied AI: Requirements discovery, solution architecture, cross-functional delivery, support SLAs, user adoption and ongoing operations; independent work with Ollama, SSO/OIDC, Docker, Traefik, Tailscale and monitoring.

SELECTED ENGINEERING WORK

TSD-Essentials | Company-wide Comerica help desk automation Architected and developed a full production PowerShell platform adopted across the Comerica help desk. From a user LAN ID, it surfaces account and endpoint context, detects lockouts and Group Policy problems, supports account reset actions and remote session controls, captures monitor model/serial information, launches Teams interactions and VoIP calls, and performs self-auditing. Replaced fragmented manual support steps with a consolidated technician workflow.

AudioCodes SmartTAP | Security-sensitive recording and audit automation Developed PowerShell/Python workflows to handle highly confidential recorded communications in a federally regulated and audited banking environment, potentially including trading-related voicemails and corporate securities-planning discussions. Automated call metadata, identity resolution, audit/CSV exports and selective recording retrieval with approved-user validation, fail-closed handling of unresolved identities, dry-run review, scoped exports, credential protection, detailed logs, API retries and media validation. Prioritized confidentiality, traceability and limiting unintended exposure.

Internal enterprise tools | Reusable operational utilities Developed a Visual Basic/SQL Server hardware inventory system, Java subnet-discovery tool, mapping utility using Google Maps API/VBScript, and multi-host connectivity testing tools for IT teams.

PROFESSIONAL EXPERIENCE

COMERICA BANK | Lead Programmer / Field Support Services

Houston, TX • 2005 – Present

- Led end-to-end development of enterprise technology solutions: analyzed existing architectures, translated internal-customer requirements into technical plans, collaborated across IT teams, and supported implementation and production use.
- Provided hands-on application, endpoint, server and network support; coordinated technical work and support resources to address operational issues and meet service-level expectations.
- Supported the corporate headquarters relocation from Michigan to Dallas through technology design, implementation and operational support.
- Helped deliver Citrix thin-client technology across 13 sites and hardware/network modernization across 21 banking centers, including three large multi-protocol network sites in Houston.

DIMENSIONAL SOLUTIONS | Network Engineering / Software Development & Systems Administration

Houston, TX • 2017 – Present

- Administered VMware ESXi/vSphere and Hyper-V environments, virtual machines, Windows and Linux servers, storage, DNS/DHCP, and infrastructure support workflows.
- Executed Windows Server migration projects, Exchange modernization and Linux-based spam filtering; implemented backup and redundant connectivity solutions.
- Developed PowerShell and SQL automation and maintained network configurations, including voice/data separation and reliable service operations.

INDEPENDENT AI, IDENTITY & INFRASTRUCTURE ENGINEERING

- Operate a multi-host Linux/virtualization environment with Docker/Proxmox, Cloudflare/TLS, Traefik reverse proxy, Tailscale networking and Authentik SSO/OIDC; troubleshoot authentication, routing, and service availability with monitoring and health checks.
- Experiment with local Ollama language models and AI-assisted document/event classification through Paperless-ngx and Home Assistant; these are independent projects, separate from corporate deployments.
- Built and ran AI-assisted email organization workflows with confidence-based thresholds, hold-for-review decisions, and preservation of messages when evidence was incomplete.

EARLIER EXPERIENCE

AMORE MED SPA | IT Administrator | Houston, TX | 2007 – 2008 — Designed and supported the business network, servers, workstations and backup operations.

UBISOFT / RED STORM ENTERTAINMENT | Quality Control Technician | Cary, NC | 2004 – 2005 — Executed software QA testing, tracked defects and supported resolution before product release.

EDUCATION

Bachelor of Science, Computer Science | Minor: Information Technology | Franklin Pierce University, Rindge, NH | 2004