

MICHAEL P. RAGSDALE

Systems Architect | Full-Stack Developer | Accessibility Specialist Norfolk, VA (open to relocation within Virginia) | github.com/raggiesoft | michaelpragsdale.com

Professional Summary

Systems Administrator and Developer with a philosophy of "Empathetic Engineering." Specializing in building resilient, JSON-driven web architectures and automating complex media pipelines. Committed to WCAG 2.1 / Section 508 compliance and creating technology that respects the user's nervous system.

Technical Arsenal

- **Languages & Scripting:** C#, .net 10, PHP 8+, JavaScript (ES6+), Bash / Shell, HTML5, CSS3 / SCSS, Python
- **Infrastructure & Cloud:** DigitalOcean (Droplets/Spaces), **Nginx (Custom Server Blocks/Rewrites)**, Cloudflare (DNS/SSL), Certbot, Linux (Ubuntu/Debian)
- **Compliance & Tools:** WCAG 2.1 AA, Section 508, Deque axe, ActiveNet CRM, Git, Microsoft 365

Relevant Technical Experience

RaggieSoft (Personal Brand & Projects)

Norfolk, VA Founder & Systems Architect | Est. 2008 – Present

- **Personified DevOps Ecosystem (Bash/Shell):** Architected "The Family," a decoupled CI/CD pipeline designed for security through isolation on the production server ("Jessica").
 - **"Jenna" (Dev-Side):** A local synchronization agent (jenna-sync.sh) that manages version control and pushes encrypted assets to **DigitalOcean Spaces** via **rclone**.
 - **"Sarah" (Server-Side):** An autonomous deployment guardian (sarah-deploy.sh) that performs hash-based integrity checks against GitHub and executes "sudo-less" atomic updates, strictly enforcing **SetGID** permissions to mitigate privilege escalation.
- **Security & Routing Topology:** Engineered a non-standard web architecture to mitigate automated bot attacks.
 - **"Amanda" (The Fortress):** Configured **Nginx** to serve from an obfuscated directory (/amanda) rather than standard public paths, protecting core assets from scraping.
 - **"Elara" (The Gatekeeper):** Developed a custom **PHP 8** single-entry router (elara.php) that intercepts and sanitizes 100% of incoming traffic before dispatching to view controllers.
- **Systems Engineering:** Engineered "**Silas**," a proprietary **.NET 10** ecosystem comprising a server-side integrity guardian and a **MAUI** desktop architect, providing a strictly typed GUI for managing complex JSON data shards.
- **Creative Automation (Python/FFmpeg):** Developed specialized processing agents to manage the "Stardust" narrative universe.
 - **"Paige" (Literary Editor):** A **Python** utility (process_book.py) that ingests raw Docx manuscripts and compiles them into structured JSON for the WCAG-compliant web reader.
 - **"Harper" (Studio Engineer):** A **Bash**-based audio pipeline (transcode-all.sh) that recursively scans master recordings and automates **FFmpeg** transcoding for web-optimized streaming.
- **Empathetic Engineering:** Developed "**Lyra**" (lyra.sh), a "Silent Safety" data sanitization engine that preemptively prunes user-defined trigger terms from imported datasets, ensuring a psychologically safe workflow for neurodivergent users.
- **Full-Stack Development:** Architected "The Stardust Engine," a JSON-driven media platform featuring a **Hotwire Turbo** "No-Build" frontend and a persistent, event-driven audio player.

Virginia Beach Parks & Recreation

Norfolk, VA Operations Support & Technical Lead | May 2023 – Present

- **Legacy Data Normalization & Compliance:** Developed a manual ETL (Extract-Transform-Load) process to bridge gaps in a legacy municipal reservation system. Converts raw scheduling data into **Section 508 compliant**, accessible operational documents, enriching the output with cross-facility resource availability (e.g., city-wide court schedules) to optimize staff decision-making.
- **Technical Training & Onboarding:** Serves as the primary trainer for the **ActiveNet CRM**, instructing new staff on data integrity protocols, payment processing security, and complex account management to ensure operational consistency.
- **Operational Leadership:** Functions as a rotating Shift Supervisor, overseeing financial reconciliation for high-volume transactions (memberships, private rentals, and POS). Acts as the primary escalation point for resolving complex patron account issues and facility logistical conflicts.

ODU Online (Old Dominion University)

Norfolk, VA Section 508 Compliance Specialist | Nov 2019 – Jul 2022

- **Accessibility Compliance:** Ensured WCAG 2.1 AA & Section 508 compliance for online courses, serving as a critical checkpoint before content publication.
- **Remediation & Testing:** Remediated web pages and documents, verifying student code and utilizing tools like **Deque axe** for detailed reporting.
- **Migration Support:** Provided technical support to instructional designers during a large-scale migration to the Canvas LMS.
- **Standardization:** Designed and developed a universal, accessible template for the University Policies section of the syllabus, streamlining the workflow for faculty.

Residence Hall Association (ODU)

Norfolk, VA Director of Administration | Sep 2015 – May 2017

- **Digital Administration:** Administered the organization's **Google Workspace for Education** environment, re-architecting a disorganized legacy file structure into a streamlined hierarchy that optimized workflow for the executive board.
- **Leadership:** Elected by the student body to manage all administrative functions, ensuring the accurate retention of official minutes, legislation, and organizational history.

Dominion Enterprises

Norfolk, VA Mobile Applications Developer Intern | Sep 2012 – Dec 2012

- **Mobile Development:** Gained hands-on experience in cross-platform mobile development for Android & iOS using the Titanium SDK.
- **App Creation:** Developed and deployed a "Real Estate Dictionary" mobile application to demonstrate proficiency with the SDK and mobile architecture.

Education

Tidewater Community College

Norfolk, VA Associate of Science, Information Technology (In Progress, Expected December 2026)

- **Focus:** Software engineering principles, database management, and web application development.

Old Dominion University

Norfolk, VA Bachelor of Science, Customized Studies in Leadership (In Progress)

- **Focus:** Organizational leadership, project management, and team dynamics.

Wilson Workforce & Rehabilitation Center

Fishersville, VA *Certificate, Business & Information Technology (2011)*

- **Focus:** Business fundamentals and information technology applications.