Steven A. Holland

stevenaholland.com

I design, build, and run the software people depend on, backed by smart, performant data: from the first requirements conversation through the data model and storage, the code, and deployment, to ongoing maintenance and changes.

EMPLOYMENT

IT Manager & Lead Research Safety Software Developer

2020 – present

Division of Research Safety · Supervisor

Responsible for all IT projects and staff at the Division of Research Safety.

- Took DRS from servers in a supply closet to a 50/50 VM/cloud stack, consolidating 10+ web apps and 15 databases under shared design and coding standards, with data shared across five units.
- Grew the team from 1 developer to 3 full-time developers and 4 part-time graduate students, with AI built into daily work and products.
- Built a customer-service culture that turned DRS IT from a compliance nuisance into a trusted enabler of research.
- Shipped a weekly compliance digest covering 9 compliance areas, AI polishing of user-created CMS pages, and AI-generated custom reports.
- Leading a multi-unit vendor-app replacement that will save ~$50k/year; trimmed costs with a reduced hardware replacement cycle and a simpler hosting stack.

Principal Software Developer

2016 – present

Illinois Department of Natural Resources · Grant Work: Co-Investigator

IDNR Fisheries web application development and research support.

- Build the platform behind the public ifish website and a data portal where fishery researchers record field data and run analyses and reports.
- Retired legacy apps in multiple languages and a flat-file desktop app, cleaning and converging their data into one platform.
- Contribute to the grant's quarterly and annual study reports.

Senior Research Safety & Admin Developer

2017 – 2020

Division of Research Safety · Supervisor

- Built compliance reporting at every level (PIs, staff, departments, college managers): 30+ report types.
- Converted legacy apps, Excel files, Access databases, and paper forms into modern web applications, and put hazardous-material safety training online.

Senior Research Safety Developer

2014 – 2017

Office of the Vice Chancellor for Research & Innovation · Supervisor

- Led phase two of the DRS overhaul: every area of the site and its processes upgraded, five legacy apps retired.
- Set up two-way data sharing with Engineering, OVCRI, GIS, and ACES.

COMPETENCIES

Leadership
Practices: Budgeting · Community Collaboration · Hiring · Mentoring · Performance Reviews · Project Initiator

Project Management
Practices: Business Process Redesign · Change Management · Gantt Chart · Project Proposal · Stakeholder Management · Work Breakdown Structure

AI Implementation
Tech: ChatGPT Codex · Claude Code
Practices: AI-Modifiers (Agents, Skills, Hooks, etc.) · Multi-Agent Orchestration · Retrieval Augmented Generation (RAG)

Software Engineering
Tech: .NET Core · .NET MVC · .NET Web Forms · C# · Classic ASP · Dapper · Entity Framework · PHP
Practices: API Design · Architecture: N-Tier · Architecture: SOA · Architecture: Vertical Slice · Automated & Scheduled Tasks · Domain-Driven Design (DDD) · Microservices · Programming Patterns · REST APIs · Test-Driven Development (TDD)

Data & Database Engineering
Tech: Azure SQL DB · MySQL · PostgreSQL · Redis · SQL Server
Practices: Data Integration & Aggregation · Database Migrations · De-Normalization · Enterprise Data Warehouse · ETL · Multi-Tenant Data Sharing · Normalization · Query Optimization · Reporting · Schema Design

UI & Visual Design
Tech: Adobe Photoshop · Bootstrap · CSS Frameworks · HTML / CSS / LESS · JavaScript · Knockout.js · Preact.js · Vue.js
Practices: A/B Testing · Accessibility Standards · Prototyping · Responsive Design

Web Applications Analyst
2011 – 2014

Division of Research Safety

- Redesigned the division's public site with buy-in from every group within the unit.
- Merged redundant data sources into one authoritative source for every later project.

Web Specialist
2008 – 2011

College of Law

- Ran the college's website: design, content, and front-end code.
- Rebuilt the intranet from classic ASP to .NET Web Forms, adding a course CMS for faculty.
- Delivered digital door signage with custom HTML widgets, and customized the bookstore's vendor e-commerce and point-of-sale app.
- Secondary help desk: classroom A/V, AD management, and laptop repair.

ADDITIONAL EXPERIENCE

Résumé Site Builder
2026 – present

A CMS to build a professional profile site, used for www.stevenaholland.com.

- One hosted app serves multiple domains, each with its own theme, styles, and layout.
- Classic content-block pages for a CV site, or a linked knowledge graph like www.stevenaholland.com, plus a generated PDF résumé.

echobotresearch.com
2025 – present

A research platform for conducting studies with LLM chatbots.

- Studies assign participants to condition groups, each with a different chatbot behavior.
- Records every interaction, with analysis of custom behaviors.

HOA President
2023 – 2025

Increased revenues, lowered expenses, improved owner satisfaction and confidence with the HOA.

- Raised revenue 5% and cut expenses 4%; collected $30k+ in back dues, 66% of the outstanding balance.
- Settled a 3-year-old owner lawsuit and built the first budget with real long-term estimates (roof, siding, pool).
- Launched a public website, a PayHOA resident portal, and a new-owner welcome packet.
- Pushed projected insolvency back an estimated 8 years, with record annual-meeting turnout.

Infrastructure & DevOps

Tech: Active Directory · Azure · Git · IIS · Linux · Shibboleth · SVN · Windows
Practices: Backup Systems · CI/CD Pipelines · Containerization · DNS Management · Serverless Functions · Virtual Machines

Modernization & Upgrades

Practices: Digitization · Incremental Migrations · Parallel Running · Phased Rollout · Sunsetting · Technical Debt Assessment

Data Governance & Privacy

Practices: FERPA · GDPR · PIPA · PIPL

EDUCATION & TRAINING

Illinois Supervisory Skills Program

University of Illinois Urbana-Champaign · Jun 2021

B.S. Information Sciences and Technology

Penn State University · 2003 – 2007

INTERESTS

Martial Arts · DIY · The Outdoors