DAVID PATRICK DONOHUE

FULL STACK DEVELOPER | A.I. INTEGRATION | CYBERSECURITY AUTOMATION

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PROFESSIONAL SUMMARY

Forged through challenges. Guided by impact. Creating tomorrow's solutions.

I'm a full-stack developer and cloud/cybersecurity technologist with over a decade of diverse experience—spanning healthcare IT leadership to cutting-edge web application development. I build secure, scalable systems using Python, Django, Ruby on Rails, JavaScript, and PostgreSQL, having navigated teams through intricate cloud architectures, infrastructure transformations, and compliance requirements. My approach combines technical precision with genuine empathy and adaptability, focusing on solving problems that matter. From streamlining clinical workflows to engineering robust digital platforms, I create technology that strengthens capabilities and drives meaningful progress.

TECHNICAL EXPERIENCE

FULL-STACK DEVELOPMENT

- Python, JavaScript (ES6+), TypeScript, Ruby
- Django, Ruby on Rails, Node.js, React.js, Vue.js, Express
- PostgreSQL, MySQL, MongoDB, Redis
- HTML5, CSS3, Sass, Bootstrap, Tailwind CSS

AI & MCP DEVELOPMENT

- MCP server architecture & tool development
- Al APIs: OpenAl, Gemini, Claude
- Al-driven automation & script generation
- Prompt engineering & AI workflow integration

CLOUD & DEVOPS

- AWS (EC2, S3, Lambda, RDS), Azure, GCP
- Docker, GitHub Actions, GitLab CI
- Ansible, VMware, VirtualBox
- Automated deployments & cloud migrations

CYBERSECURITY & LEADERSHIP

- Ethical Hacking, Kali Linux, Metasploit, Nmap, Burp Suite)
- Network Security: IDS/IPS, Firewall Config, VPN Setup
- Compliance: HIPAA, HITECH, GDPR, PCI DSS
- Stakeholder engagement & cross-functional liaison

PERSONAL PROJECTS

Model Context Protocol Server

Python, FastAPI, Docker, OpenAI API, Gemini API, Google Gemini, ASGI, JSON-RPC

github.com/sdirishguy/ mcp_server_project

- Developed a secure Model Context Protocol (MCP) server enabling Al agent workflows with modular tools for filesystem operations, shell commands, and LLM code generation
- Implemented robust security features including path traversal protection, authentication, and comprehensive audit logging
- Designed JSON-RPC over HTTP architecture with ASGI framework for high performance and scalability
- Containerized deployment for portable, consistent environments

Shell Rosetta

Python, Flask, Machine Learning,
Docker, REST API
github.com/sdirishguy/shellrosetta

- Created cross-platform CLI tool that translates commands between Linux/Bash and PowerShell with bi-directional support for complex flags, pipelines, and system commands
- Built machine learning engine for pattern recognition and intelligent command suggestions based on usage history
- Designed extensible plugin architecture supporting Docker, Kubernetes, AWS, and Git command translations
- Developed REST API and web interface for programmatic access with comprehensive test coverage

MCPHelper Sublime Text Plugin

Python, JSON-RPC, Threading, Error Handling

github.com/sdirishguy/ MCPHelperSublimePlugin

- Engineered production-ready Sublime Text plugin connecting code editors to local AI services for code generation, review, refactoring, and translation
- Implemented non-blocking threading architecture to maintain editor responsiveness during AI operations
- Created comprehensive error handling system for network issues, server errors, and input validation
- Published to Package Control with extensive documentation and cross-platform compatibility

DavidPDonohue.com - Personal Portfolio Website

Next.js, TypeScript, Tailwind CSS, GitHub Actions, AWS Lightsail

github.com/sdirishguy/davidpdonohue

- Designed and developed responsive portfolio website with terminalinspired interface featuring dynamic typing animations
- Implemented custom TypeScript utility functions for terminal path generation and animation state management
- Created CI/CD pipeline with GitHub Actions for automated deployment to AWS Lightsail
- Optimized performance with code splitting, lazy loading, and bundle size optimization

PROFESSIONAL EXPERIENCE

Lucky D's Hostel | IT Manager (Part-Time) | San Diego, CA | Sept 2019 - Sept 2024

- Architected and deployed comprehensive IT infrastructure using Cisco Meraki SD-WAN, implementing VLANs and QoS policies that increased network reliability by 99.8%
- Engineered multi-layered security framework with intrusion detection systems and encrypted data channels to achieve GDPR and PCI DSS compliance
- Orchestrated migration from on-premise servers to AWS cloud infrastructure (EC2, S3, RDS), reducing system downtime by 85% and enabling secure remote management
- Developed and delivered cybersecurity training program covering phishing prevention, password management, and data handling protocols, resulting in 60% reduction in security incidents

Notch8 | Full Stack Web Developer | San Diego, CA | Jun 2016 - Aug 2019

- Engineered responsive web applications using Ruby on Rails, React/Angular frontends, and PostgreSQL/MySQL databases with RESTful API architectures
- Implemented containerized microservices architecture using Docker, Rancher orchestration, and Ansible configuration management, deploying to AWS EC2 and Google Cloud Platform
- Designed and maintained CI/CD pipelines with automated testing (RSpec, Jest), code quality checks, and blue-green deployment strategies
- Delivered enterprise-grade solutions for clients including Broadband Forum (member management portal), UCSD S.U.R.F (applicant tracking platform), and TCTrac (tenant-contractor coordinator platform for the Hudson Yards project)

Q-Centrix | Software Engineer Intern | San Diego, CA | Apr 2016 – Jun 2016

- Enhanced HIPAA-compliant healthcare application using Ruby on Rails backend, Angular/Ember frontend, and PostgreSQL database with encrypted PHI storage
- Collaborated in Agile environment using Jira for sprint planning, daily standups, and retrospectives, delivering features on two-week cycles
- Developed complex form validation logic and data normalization for NCDR clinical registry compliance, ensuring accurate healthcare metrics reporting
- Implemented BDD testing framework with Cucumber and RSpec while pair-programming, achieving 90%+ test coverage for critical application components

Career Break | 2013 - 2017

- Overcame significant health challenges including cancer treatment and recovery, developing exceptional resilience and renewed purpose
- Completed intensive 20-week full-stack development bootcamp at LEARN Academy, mastering modern web development fundamentals and practices
- Contributed to HIPAA-compliant healthcare applications during software engineering internship, applying regulatory knowledge to technical implementation
- Rebuilt technical skills through self-directed learning and practical application, successfully transitioning back to professional software development

XIFIN, Inc. | Project Manager – Implementation | San Diego, CA | Nov 2012 – Mar 2013

- Led enterprise-scale deployment of SaaS revenue cycle management platform for national reference laboratory, coordinating implementation for 100+ concurrent users
- Developed technical workflow mappings between laboratory information systems (LIS) and billing platform, reducing claim rejection rates by 30%
- Managed cross-functional implementation team using Agile methodologies, delivering complex healthcare IT project on schedule and within budget constraints
- Created and delivered role-based technical training curriculum, achieving 95% user adoption rate with minimal post-implementation support tickets

Healthcare Data Solutions | Project Manager – Implementations & Special Projects | Miami, FL | 2010 – 2012

- Orchestrated 50+ implementations of Allscripts Professional EHR/PM systems, including HL7 interfaces, lab connectivity, and e-prescribing modules
- Developed technical documentation and custom SQL reports that improved Meaningful Use attestation success rates, securing maximum Medicare incentive payments
- Maintained perfect implementation success rate across diverse practice environments while achieving 98% client satisfaction through technical excellence
- Engineered self-service knowledge base and troubleshooting guides, reducing post-implementation support requirements by 50% and improving practice autonomy

Modernizing Medicine (formerly gMed Inc.) | Senior Application Specialist | Weston, FL | 2007 – 2010

- Implemented specialized gastroenterology EHR systems (gCare2/gGastro) with custom clinical workflows, procedure documentation, and reporting capabilities
- Led technical deployment for multi-location enterprise practices with 26+ providers, configuring interfaces, templates, and clinical decision support tools
- Redesigned implementation methodology with enhanced technical preparation, reducing post-go-live support requirements by over 50%
- Achieved exceptional client satisfaction (4.96/5.00) through technical expertise, selected for Product Development Committee to guide platform evolution

EDUCATION

Western Governors University - Remote

B.S. in Network Operations & Security - Started 2020, on hold

LEARN Academy - San Diego, CA

Full-Stack Web Development Bootcamp - 2016

- Immersive program focused on Ruby on Rails, JavaScript, PostgreSQL, HTML/CSS, Bootstrap, Git, and Heroku, with exposure to React.js.
- Built and deployed multiple dynamic web applications in collaborative team environments.

University of Nebraska – Lincoln – Lincoln, NE

B.S. in Economics (*Pending, 6 credits remaining*)
B.B.A. in Finance (*Pending, 6 credits remaining*)

Vanderbilt University - Nashville, TN

B.A. in Economics & Political Science (withdrew due to prolonged illness)

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

AWS Academy

AWS Cloud Architect Associate – 2024

San Diego College of Continuing Education

- Python Programming 2025
- Data Management with Python 2025
- Cybersecurity Analyst Certification Program (In Progress) 2025–2026

Udacity

- Generative AI with AWS Nanodegree 2025
- Ethical Hacking Nanodegree 2025
- Frontend Development Nanodegree 2025
- Certificate in Cloud Computing 2024
- Mobile & Web Application Development 2018