

Daniel C. Eckert

919-789-1355 • dan@drakontas.org

OVERVIEW

Engineer, technical investigator and problem solver; creator of robust scalable infrastructure, lasting products, and healthy organizations for more than 15 years. Adeptly generates large cost savings and productivity optimizations for enterprises, startups, universities, schools, and nonprofits. Passionately learns new technologies and techniques to implement solutions and deliver results. Delivers context-sensitive leadership by blending technical expertise and customer focus. Seeks to design new approaches, reinforce & scale infrastructure, build teams, pivot organizations, optimize product development, and streamline operations through data-driven strategy and iterative execution.

AREAS OF EXPERTISE

| | | |
|---------------------------------------|---------------------------|-------------------------|
| Agile Design, Engineering, Operations | Budget Development | Requirements Definition |
| Infrastructure Design & DevOps | Staff & Vendor Management | Strategic Planning |
| Process Analysis & Optimization | IT Governance | Crisis Management |
| Contract Negotiations | Business Case Development | Succession Planning |

PROFESSIONAL EXPERIENCE

Principal Engineer, Architect, Engineering Lead at Comcast (VIPER) Oct 2016 – Present

Delivered over \$5m combined CapEx/OpEx value to date (\$3m+ in first 4 months) while developing innovative products and pivoting a stagnant, traditional, analyst-oriented team to a dynamic, efficient DevOps software engineering group. Designed modular software platforms, hybrid cloud+premise infrastructure, and high impact business insights. Assessed national & regional datacenter infrastructure (26 sites), codebase (Bash, Go, jQuery, Perl, PHP), and org/ops risk. Implemented source control (GitHub Enterprise) and software engineering (unit testing, TDD, continuous integration). Hired, trained, led, and mentored a team of 9 software engineers (pair programming, workshops, 1:1). Developed requirements and managed communication and key stakeholder relationships. Resolved critical business-impacting technical problems escalated from partner teams and junior engineers. Automated workflows to reduce human time/effort (Bash, Perl, PHP, PowerShell). Assessed and designed hybrid services for OpenStack, AWS, Azure, and premises.

- Designed and developed MVC APIs, UIs, and scalable message-oriented microservices (d3, jQuery, OpenStack, Perl, PHP7)
- Built multi-region, multi-instance scalable, distributed systems and negotiated security compliance policies
- Increased team value and usability by designing a consolidated platform to replace ad hoc products
- Decreased feature delivery cost up to 98% (40hrs+ vs 30mins; \$3k+ savings/feature, 10x+ productivity)
- Recovered \$2.53m annual OpEx by negotiating consolidation of unused datacenter resources (12 groups, 26 DCs)
- Increased team capability 10x+ with DevOps culture, hiring, and training (grew from 1 to 9 engineers)
- Improved hiring by creating job descriptions, conducting phone screens, implementing standard technical interviews
- Decreased time-to-contribute 90% by creating & refining a standard onboarding process (1 day vs 2 weeks)
- Created only comprehensive, consolidated view of Comcast's national backbone, Internet transit, and DC networks
- Designed, developed, and deployed a fully dynamic network analysis tool to measure datacenters and network backbone
- Increased ROI for \$10m+ internal OpenStack investment by enabling partner teams to use it more effectively -- created documentation and OpenStack API helper scripts (PowerShell, Perl, Bash), negotiated quotas and usage policies
- Grew annual VIPER Ops Performance team budget from ~\$500k to ~\$2m to address org needs (tools, services, staffing)

Founder at HostedGroups Jun 2006 – Present

Launched and scaled a web service that manages nonprofit org activities, volunteers, and engagement. Built client relationships and supported dozens of organizations with thousands of constituents. Hired and led teams of up to 3 engineers using Agile/Scrum methodologies. Designed and developed multi-layer service architecture and intuitive user experience using emerging technologies and best practices, including Agile MVC design, message-oriented architecture, and iterative revisions through 7 major releases (Bootstrap, HTML5, jQuery, MySQL, Perl, PHP). Conducted security and performance audits and implemented mitigations and optimizations.

- Reduced 95th percentile page-load times from 120 seconds to 2 seconds (98%)
- Reduced SQL query time up to 99% by designing and developing a caching system
- Reduced org management time >90% while increasing org capacity and output up to 400%

Founder, Principal Consultant at Drakontas Consulting

Jun 2002 – Present

Built a multi-office nationwide practice with hundreds of clients and key industry vendor partnerships. Delivered enterprise-grade network architecture, software development, risk assessment, staff training, and productivity improvements while minimizing total cost of ownership and creatively meeting tight budgets. Designed multi-building BYOD campus networks, ultra-high density wireless networks for stadiums and conferences (4:1, 15000+ devices), web services, and microservice platforms (AWS, Azure, GCP, Rackspace, Softlayer, hybrid & multicloud; REST, message oriented architecture, SOA). Created a 3-year product cycle to deliver cost savings (new/used/rentals). Hired and led teams of up to 20 senior and associate consultants.

- Increased YoY revenue and client activities up to 300% while increasing staff roster from 1 to 20
- Increased clients' average network throughput up to 10,000% by designing new architecture
- Improved client WAN latency up to 90% via new configs, equipment, and ISP negotiations
- Managed and structured client risk by planning infrastructure spending vs ad hoc crises
- Reduced initial client burden up to 95% by creating in-house financing and vendor partnerships
- Improved project delivery time 90% via process optimization, warehouse operations, and staff training
- Increased client capability and confidence by creating infrastructure security and legal compliance practices
- Improved client infrastructure stability, saving thousands of hours (eliminated incidents, downtime)
- Saved nonprofit and education orgs up to \$200,000 per year through community sponsorships

Software Engineer II, Technical Program Manager II at Microsoft (Bing, Azure)

May 2012 – Sep 2015

Led implementation, optimization, and operation of software defined networking infrastructure components in a DevOps organization. Designed and developed data analysis and resource management software (AngularJS, ASP.net, Azure, Bootstrap, C#, HTML5, jQuery, MS-SQL, MySQL, Perl, PHP). Developed project requirements, authored technical specifications, planned development cycles, scheduled resources, and led development of 18+ cross-org projects in a DevOps environment. Represented physical networking and SDN requirements in datacenter architecture design decision making. Triaged and coordinated live-site incident response as part of 24x7 on-call rotations, managed stakeholder communications, and completed postmortem investigations. Interviewed and helped hire hundreds of candidates for PM and software engineering roles.

- Streamlined the datacenter ops pipeline (accounting, engineering, management, maintenance) by creating the first complete view of a decade-old ad hoc multi-org business model, new software tools, and process changes
- Increased organizational agility by designing and developing reporting services for CDN performance, multi-channel communications, and incident ops, and by creating a standard format and process for monthly COGS and I&E reports
- Delivered converged multi-property SDN services, IP management, and decoupled architecture
- Reduced datacenter ops costs by finding opportunities and leading teams to enable 800% larger clusters (8k vs 1k nodes)
- Reduced support costs and increased satisfaction by delivering improved documentation, user-directed infrastructure logging & reporting, and increased cross-team, multi-group collaboration
- Trained Cloud Solution Architects to serve Azure customers (network, infrastructure, software architecture; public, private, and hybrid cloud/on-prem solution design)

Chief Technology Officer, Infrastructure Architect at Research Triangle High School

Jun 2012 – Dec 2013

Created a foundation for experimental STEM-oriented learning techniques as the first CTO of a newly chartered public high school. Designed and implemented complete technology infrastructure, information technology policies, regulatory compliance, and tech budgets up to \$100k in a heavily DevOps environment. Recruited and led 5-10 person teams to implement construction projects, identified requirements, managed resources, and negotiated vendor contracts. Mentored students in technology and entrepreneurship. Developed key partnerships with vendors, community partners, government agencies, and peer institutions.

- Implemented cutting edge, unified multi-service infrastructure and saved >\$40k in first 3 months
- Generated ~\$10k year-one revenue by creating a laptop sales program for low-income families
- Saved hundreds of staff hours by designing and developing custom data management systems
- Designed and deployed a high density BYOD network (3:1) and loaner laptop program
- Established RTHS as leader in per-student Internet utilization (460kbps vs. median 40kbps)
- Increased achievement statewide by advising technology policies and systems at peer schools
- Created multi-year infrastructure strategy and successfully transitioned department leadership

ADDITIONAL PRIOR ROLES

Network Engineer in 3 more roles spanning 5 years, including Cisco Systems & NC State University (multi-vendor ecosystems)

Software Engineer in 4 more roles spanning 6 years, including Iowa State University & SAS Institute (70+ languages)

Security Consultant in 1 more role spanning 2 years at Cigital

BOARDS OF DIRECTORS

Summary: Launched, scaled, and pivoted 8+ small and medium nonprofits across 6 years (arts, tech, education).

- Oversaw & evaluated organization finances, executive leader performance, and execution of mission
- Developed policies to streamline operations, improve finances, expand capacity, and enhance process quality
- Built development strategies for boards, finances, logistics, staffing, operations, and volunteers
- Authored governing documents, policies, and long-term strategic plans
- Mediated conflicts and enhanced collaboration among boards, executives, and staff

| | |
|---|---------------------|
| Chairman, Secretary & Founding Director at Hacker Fund (\$1.2m budget, 1 staff) | Jan 2015 – Present |
| Director at School of Acrobatics & New Circus Arts (\$1.8m budget, 70 staff) | Jul 2014 – Dec 2016 |
| Secretary & Director at Seattle Public Theater (\$500k budget, 60 staff) | Oct 2014 – Jul 2016 |
| Vice President & Director at Bowie Community Theatre (\$40k budget, 0 staff) | Apr 2014 – Apr 2016 |
| Secretary & Director at Theatre Puget Sound (\$500k budget, 10 staff) | Jul 2014 – Dec 2015 |
| Treasurer & Director at Zero Waste Washington (\$150k budget, 2 staff) | Dec 2014 – Dec 2015 |
| Secretary & Director at Raleigh Little Theatre (\$1m budget, 60 staff) | Jul 2011 – Jun 2014 |
| Vice President & Founding Director at NC Association for Scholastic Activities (\$30k budget, 1 staff) | Mar 2010 – Jun 2012 |

EDUCATION

B.S. Computer Science, North Carolina State University