

Kenneth M. Graf

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Career Summary

Instructor delivering advanced security instructional labs to corporate customers worldwide as well as collegiate lectures in a classroom setting

Security Architect in Secure Development Lifecycle (SDL/SDLC) identity, and cloud security, having consulted for and provided training worldwide to companies like Intel, Microsoft and British Telecom.

Innovator as a leader in several successful and entrepreneurially oriented companies. Managed software, marketing and professional service teams that consistently grew revenue and were recognized by their industry peers for product and service quality excellence.

Areas of Expertise

- Cybersecurity threats and countermeasures in software, services, hardware and implementation
 - Proficient in all phases of the software development (SDLC) from concept through end-of-life
 - Ability to work with cross-functional and geographically disperse teams
 - Programming: C, C++, Java, Python, XML. Protocols: PKI, REST, OAuth, SOAP, HTTP, TCP/IP.
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Professional Experience

University of New Hampshire (2010 – Present)

Director, Cyber Center of Excellence (2018 - Present)

Working with the Vice Provost to expand UNH's cybersecurity offerings

- Lead the effort for designation by NSA as a Center of Academic Excellence in Cyberdefense
- Organize the faculty team creating new cybersecurity curricula
- Organize additional cybersecurity research at UNH
- Coordinate outreach with industry and government partners

Adjunct Instructor (2010 – Present)

In the Computer Science Department

- Instructor for IT666 Computer Security and CS780/880 Secure Software Design
- Mentor the cybersecurity club during weekly meetings, covering various cybersecurity topics, CTFs, and technical challenges.
- Coach UNH's competitive team. CCDC, NPTC, Cyberseed, CSAW, Hack America East.
- Coordinator for 2014 and 2018 Northeast Collegiate Cyber Defense Competition host by UNH

Liberty Mutual (2010 – 2017)

Enterprise Architect

Technical liaison between Global Information Security and Liberty Mutual's business and international groups. Subject matter expert for Cloud, Identity and SDLC.

- Defined and implemented Cloud (Azure/AWS) security best practices worldwide
- Led design of Identity as a service (IDaaS), providing worldwide SSO and Federation capabilities.
- Led enterprise Secure by Design initiative to improve SDLC processes, reducing defect rates by improving early discovery.

Intel Americas (2006 – 2010)

Enterprise Architect

Technical liaison advising clients on Intel's XML, SOA and security products while providing product requirements to engineering and product teams.

- Led enhancement effort for Intel's corporate mandated SDLC processes.
- Managed direct technology leader engagements with more than 50 leading security firms to successfully bring new Intel security products to market.
- Managed multi-million dollar delivery to Intel's largest XML appliance customer, providing architectural, implementation, acceptance and training services.
- Authored papers and presented lectures at leading XML and SOA forums, positioning Intel as an XML innovator and gained mind share with industry leaders.
- Designed the RSA'08 demo of the Intel Security Service Toolkit. The demo drew over 900 participants and showed for the first time at RSA 1 billion security operations on a single PC.
- Representative to the W3C, OGF and JCP, providing Intel teams with directional insights from other working group members and insuring standards do not negatively impact product plans.

Watchfire now IBM Rational Software (2003-2006)

Security Lead

Provided technical leadership defining quality and security objectives both internally and externally.

- Created a new SaaS based revenue stream by defining methodologies and training the professional staff to allow remote application assessments from its Ottawa headquarters.
- Influenced innovative SDL changes at Microsoft, Fidelity, IBM, CitiGroup, TVA, Viacom, United Technologies, Viacom, Sprint, Mastercard, NASDAQ, Wyatt, Fidelity Investments, CheckFree and SAIC, by delivering SDL consulting and train-the-trainer instruction to hundreds of Engineering and QA leads.
- Performed 300 application penetration tests identifying systemic flaws and poor engineering practices. Led proactive change by defining actionable tasks and process recommendations that resulted in a near perfect success rate on subsequent testing.

Security Crossing (2001-Present)

Owner

Sole proprietorship providing Application Security, SDLC and PKI consulting services.

- Accelerated FIPS-140 certification of Cisco's 3002 VPN by completing the preparation phase early and under budget, saving Cisco \$100K in fees and reducing time to market by six months.
- Coordinated the efforts of development teams and service providers in 7 domestic locations. Designed and implemented the PKI used to eliminate \$200M in annual data entry expenses for United Healthcare.

Entegrity Solutions (1997-2001)

Director of Professional Services

Managed a team of 12 consultants that provided over \$9M in direct annual revenue worldwide.

- The U.S. Federal Reserve's FedLine software transacting over \$17B daily was a typical engagement. After identifying serious security flaws in a proposed intra-bank system, led the remediation team which provided a superior security solution and saved over \$14M in implementation costs.
- Led the design and implementation of the world's first large scale community PKI deployment. The Hong Kong Post provides over 6 million citizens legally binding digital signatures. The effort included teams on 3 continents from Entegrity, HP, GTE and the HK Post.

a/Soft Development (1989-1997)

Founder, CTO

Guided company from startup to \$5M in annual revenue. Managed team supporting over 200,000 end users worldwide. Led development team delivering products for over 40 different DOS, UNIX and VMS platforms.

Boston Business Computing (1985-1989)

Founder, VP of Sales & Marketing

Guided company from garage startup to top 100 PC software company. Defined the world's first office productivity suite to run on a PC. Managed team supporting over 200,000 end users worldwide. Negotiated OEM agreements with leading ISV and hardware vendors.

Bain & Company (1980-1985)

Consultant

Provided data analysis for board level decisions of Global 1000 companies like Chrysler, National Steel, Monsanto and Guinness. Designed and managed data processing operations for remote offices in Tokyo, London, and San Francisco.

Education	M.S. Software Engineering, Brandeis University B.S. Administration, University of New Hampshire
Certifications	ISC ² Certificated Information Systems Security Professional (CISSP) AWS Certified Associate: Architect, Developer and System Administration SUN Certified Java Programmer
Affiliations	New Hampshire High Technology Council (NHHTC), Member Information System Security Association (ISSA) New Hampshire Chapter, Member W3C XML Security Working Group, Past Representative Java Community JSR321: Trusted Computing API Expert Group, Past Representative Open Grid Forum (OGF) Enterprise Adoption Requirements Group, Past Representative IETF: PKIX Working Group, Past Representative