Gordon MacKay

Principal Software Consultant

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I am a software and systems expert and technical executive with near 30 years of experience in computer, telecommunications, network security, and SaaS/Cloud platforms. I have led development and QA teams in architecting, developing, and deploying a multi-tenant SaaS-based vulnerability management platform and scanning solution which is being used worldwide by Fortune 500 organizations as part of their ongoing cyber defense programs.

I currently serve as a software intellectual property and due diligence consultant focusing on software patents & trade secrets, software development best-practices, and digital copyright/code theft.

Professional Accomplishments

- Expert in software with **~30 years of experience** as an engineer and programmer.
- Investigated over 1.2TB of wireless technology code and identified key infringing software related to patent litigation cases.
- Granted three software patents related to cyber-security scanning, correlating and management; US 9667643, US 9667642, US08938531.
- Architected, designed, and lead team in emergence of multi-tenant vulnerability management solution now handling millions of scans per week.
- Presented and evangelized cyber-security technology solutions at many conferences including RSA, ISC2 Security Congress, ISSA International Conference, Many USA BSides Conferences.

Areas of Experience

- **Programming Languages**
  C/C++/C#, Obj-C (iOS), Swift, SQL, MySQL, Java, Kotlin, JS, TS, PHP-Laravel, Python-Django, PERL, Assembly
- **Network Protocols**
  TCP/IP, UDP, HTTP, HTTPS, Serial Communication (RS-232/Bluetooth)
- **Internet and Web**
  REST, HTML5, CSS, JavaScript (full stack), jQuery, React.js, NodeJ.js, Python, JSON, AJAX, PHP, Amazon Web Services (AWS)
- **Databases**
  MySQL, Oracle, PostgreSQL, Microsoft SQL Server, IBM DB2, Google BigQuery
- **Software Development**
  Git, Github, JIRA, Apache Subversion, CVS, Ant build, CMake
- **Operating Systems**
  Linux, Unix, Mac OS X, iOS, Windows, Android

- **Telecom**
  SS7, SIP, TCP/IP, UDP, H.323, RTP, VoIP, Call Processing
- **Internet Security**
  IAM, Vulnerability Management and Scanning, DLP, Endpoint Protection, IDS/IPS, Application Security, SIEM, Cloud Security, Encryption, MFA, Phishing Detection, Security Awareness
- **Litigation Support**
  Intellectual property and patent infringement, breach of contract, trade secret, ITC, software design/source code audit and review

Litigation Consulting

- **PioneerRx, LLC v. Roman Health Ventures, Inc.** | Aug 2025–Present
  Jurisdiction: US District Court, Western District of Louisiana
  Case Number: 5:23-cv-00902
  Counsel: One LLP
  Nature of Suit: Copyright, Trade Secret, Breach-of-Contract
- **Pioneer Rx, LLC v. Danwins, LLC** | Apr 2025–Present
  Jurisdiction: Louisiana Western District
  Case Number: 5:21-cv-01738
  Counsel: Kirkland & Ellis, LLP
  Nature of Suit: Trade Secret
- **Daingean Technologies Ltd. v. AT&T Inc, et al.** | Sept 2023–Present
  Jurisdiction: Eastern District of Texas
  Case Number: 2:23-cv-00123
  Counsel: Alavi Anaipakos PLLC
  Nature of Suit: Patent
- **Lexos Media IP, LLC v. Northern Tool & Equipment Company, Inc** | Aug 2023–Oct 2023
  Jurisdiction: US District Court for the Eastern District of Texas
  Case Number: 2:2022cv00355 (filed September 12, 2022)
  Counsel:Taft Stettinius & Hollister LLP
  Nature of Suit: Patent
- **MaddenCo, Inc v. HG AutoTech LLC** | Aug 2023–Present
  Jurisdiction: S.D. Indiana
  Case Number: 3:22-cv-00173-RLY-MPB
  Counsel: Delk McNally LLP | Breazeale, Sachse & Wilson, LLP
  Nature of Suit: Copyright; Third-party Neutral
- **Taasera Licensing, LLC v. CrowdStrike |** August 2023–Present
  Case Number: 6:22-cv-01094
  Counsel: Fabricant LLP
  Nature of Suit: Patent
  Retained by: Plaintiff

- **Best Ring, LLC, et al. v. Ronin POS, LLC** | June 2023–Present
  Jurisdiction: USDC Western District of Texas Waco Division
  Case Number: 6:22-cv-00766-ADA
  Counsel: Naman, Howell, Smith & Lee, PLLC
  Nature of Suit: Patent, Copyright, Trade Secret
  Retained by: Defendant

- **K+S Potash Canada General Partnership v. Veolia Water Technologies Inc** | Mar 2023–Present
  Jurisdiction: Court Of Queen's Bench For Saskatchewan
  Case Number: QB No. 817 (filed 2018)
  Nature of Suit: Breach of Contract
  Retained by: Veolia Water Technologies Inc
  Counsel: Stikeman Elliott LLP
  Technology: Plant Design Management Systems (PDMS), Clash Detection, Database synchronization
  Role: Software Technical and Functional Review Lead

- **Multimodal Media LLC v. ZTE Corporation** | Mar 2023–Oct 2023
  Jurisdiction: U.S. District Court for the Eastern District of Texas
  Case Number: 2:21-cv-00437
  Counsel: McDermott Will & Emery
  Nature of Suit: Patent

- **Wildseed Mobile LLC v. Google LLC, and YouTube LLC** | Jan 2023–July 2024
  Jurisdiction: United States District Court Western District of Texas Waco Division
  Case Number: 6:22-cv-00357
  Counsel: Feinberg Day Kramer Alberti Lim Tonkovich & Belloli LLP
  Nature of Suit: Patent Infringement

- **A.H., by her Legal Guardian Patanne Coffey and Z.H., a minor, by her Parent and Legal Guardian Anna Hauser v. Madison Metropolitan School District et al** | Nov 2022–Present
  Case Number: 22-cv-134
  Filed in: Western District of Wisconsin
  Retained by: Plaintiff

- **RedVector.com, LLC v. Locality Media, Inc** | Oct 2022
  Case Number: 21-CA-001419
  Filed in: Delaware District Court
  Retained by: Plaintiff

- **Multimodal Media LLC v. Guangdong OPPO Mobile Telecommunications Corp., LTD.** | Sept 2022–Sept 2023
  Case Number: 2:21-cv-00436-JRG-RSP
  Filed in: Eastern District of Texas
  Retained by: Defendant

- **Robotic Vision Technologies Inc v. ABB Inc** | Aug 2022–Mar 2025
  Jurisdiction: Delaware District Court
  Case Number: 1:22-cv-01257 (filed September 9, 2022)
  Counsel: Sterne Kessler Goldstein & Fox PLLC
  Nature of Suit: Patent, Trade Secret and Copyright Infringement
  Technology: Robotic computer vision, gripper targeting, feature selection and identification

- **The Nielsen Company (US), LLC v. TVision Insights, Inc** | June 2022–Nov 2024
  Case Number: 1:22-cv-00057-UNA
  Filed in: District of Delaware
  Retained by: Plaintiff
- **Provisur Technologies, Inc v. Weber, Inc** | Jan 2022–Present
  Case Number: 5:21-cv-06113
  Filed in: Western District of Missouri
  Retained by: Defendant
- **Flypsi, Inc v. Dialpad, Inc** | Jan 2022–Nov 2022
  Case Number: 6:21-cv-00642
  Filed in: Western District of Texas
  Retained by: Plaintiff
- **Roche Diabetes Care, Inc v. Insulet Corp.** | Jan 2022–Present
  Case Number: 1:20-cv-00825
  Filed in: District of Delaware
  Retained by: Defendant
- **Wirtgen America, Inc v. Caterpillar Inc** | Dec 2021–Feb 2024
  Case Number: 1:17-cv-00770
  Filed in: District of Delaware
  Retained by: Plaintiff
- **IPCom GmbH v. AT&T Mobility LLC** | July 2021–May 2022
  Case Number: 2:20-cv-00322
  Filed in: Eastern District of Texas
  Retained by: Plaintiff

Technical Due Diligence & Audits

- **Safe Life Defense** | Internal Tech Audit | June 2023
  Technology: e-Commerce, SaaS
- **Genpact** | M&A | May 2023
  Technology: AI/ML, Predictive Analysis

Intellectual Property Consulting

- **E^NAT IP** | Technical Vetting | Apr 2023–Oct 2023
  Technology: Virtual Private Network, CDN, M2M, Edge/Fog Computing, Enterprise Solutions

Software Dispute Due Diligence

- **Pre-litigation Patent Infringement Assessment** | Dec 2023–Present
  Technology: mobile gaming, geolocation, user and device verification, jailbreak detection, proxy detection, Bluetooth beacon, ad delivery, biometric authentication.

Employment

Quandary Peak Research

Principal Software Consultant | Austin, TX | July 2021–Present

Bringing my computer science, software architecture and strong source code implementation knowledge to bear, in serving Quandary Peak clients such as investors, private equity firms, and companies pursuing mergers, acquisitions, IP Litigation and more.

- Researching patents and related technologies for investigating patent infringement cases.
- Searching through millions of lines of software and finding source code related to patent claims.
- Assisting in writing expert testimonial reports related to patent infringement cases.
- Evaluating software architectures of various products and assessing overall characteristics, strengths and weaknesses.
- Analyzing source code to opine on various software characteristics such as scalability, interoperability, security and extensibility.
- Utilizing a suite of tools to programmatically detect and inventory the presence of open-source software and potential exposure to problematic open-source licenses, code similarities, and security vulnerabilities.
- Interfacing with Private Equity, VC, and other clients, as well as executives/technical team from target companies.
- Documenting and conveying technical findings to clients in the form of formal reports and/or executive briefings.

Digital Defense, Inc.

Executive Vice President and Chief Technology Officer | San Antonio, TX | Jan 2010–Apr 2021

Spearhead, develop and maintain DDI's technology roadmap by teaming up with others: cross functional DDI teams, 3rd party technology partners, and most of all, with DDI clients. Oversee, manage, encourage, help DDI's Technology team in emerging and delivering valuable integration solutions between frontline vulnerability management platform and other IT and security technologies.

- Successfully managed, guided, mentored and acted as player/coach with multiple technology teams, including feature development, vulnerability research, and quality assurance team by steering operational efficiency.
- Served as Agile Product Owner for the DDI Technology Integrations team, helping define the team's stories, prioritizing the team's backlog, interfacing with DDI Product Management and the Executive team to ensure effective prioritization of integrations on the roadmap.
- Interfaced and socialized with DDI clients and prospects to understand and negotiate requirements for integrations between DDI's vulnerability management platform, and IT/security solutions thereby helping clients reduce operations spend by 20%.
- Spearheaded vulnerability management gamification idea within the Frontline VM platform which enabled Digital Defense to anonymously compare client risk scores and influence the entire ecosystem to minimize security risk.
- Developed, interacted and worked with a legal team, and ultimately attained 3 patents for DDI's vulnerability scanning and management technology.
- Worked side-by-side and contributed to DDI's Marketing arm by serving as key spokesperson for DDI's solutions. Presented on security related topics at many security conferences, including RSA security, ISC2 Security Congress, ISSA International Conference, Many USA BSides Conferences, while highlighting across media and security articles including, Forbes, Fox Business News, CIO review, SoftPedia, and IT World Canada and leading DDI blog website www.digitaldefense.com

Vice President, Platform Development | Digital Defense, Inc | San Antonio, TX | Jan 2006–Jan 2010

Partnered, managed, guided and mentored a large team of developers to develop security features for frontline vulnerability management platform as well as engaged with clients and internal stakeholders to consolidate feature requirements, set priorities and meet expectations.

- Served, managed and mentored a large team of software developers, vulnerability researchers, and QA team members in the development, delivery and ongoing maintenance of DDI's products.
- Spearheaded deployment of key DDI frontline features, including application-level encryption of cloud data, requiring expert familiarity with symmetric and asymmetric encryption.
- Oversaw maintenance and execution of relational data architecture model for all vulnerability management software features.
- Developed security features for SaaS based Frontline platform by directing DDI development organization.

Principal, Software Architect | Digital Defense, Inc | San Antonio, TX | Nov 2002–Jan 2006

Led a team of 4 engineers in architecting, designing and deploying the company's multi-tenant SaaS-based patented in-house vulnerability management platform. Acted as team's primary data architect, as well primed the Java based business logic layer.

- Architected and designed application's relational data tables including over 200 related tables.
- Implemented application's relation tables in Oracle RDBMS.
- Designed and implemented application's critical key business logic in Core Java.

Alcatel USA

Senior Software Engineer and Team Lead | Plano, TX | Sept 2000–Nov 2002

Led team of engineers designing and implementing internal in-memory database for Alcatel VoIP Softswitch product. Work included:

- Implemented Real-time in memory core database features including concurrency control implemented in C++.
- Implemented a prioritized optimistic concurrency control algorithm with priority for call transactions.
- Modified real-time database code such that it supported multi-threaded application transactions.

Software Engineer | Alcatel USA | Plano, TX | Jan 1996–Sept 2000

Worked within a team of engineers to design, develop and maintain Call Processing and platform features for Alcatel/DSC switching group.

- Designed and implemented call processing features involving SS7 protocols as well as call-state software design.
- Implemented Local Number Portability feature for DSC Tandem Switches. Implemented in Zilog Z80 Assembly language as well as C language.
- Implemented many Calling Card features for DSC Tandem switches. Implemented in Zilog Z80 Assembly and C languages.

Patents

- **U.S. 9667643**
  Apparatus, system, and method for correlating security vulnerabilities from multiple independent vulnerability assessment methods. (Granted).
- **U.S. 9667642**
  Apparatus, system, and method for reconciling network discovered hosts across time. (Granted).
- **U.S. 8938531B1**
  Apparatus, system and method for multi-context event streaming network vulnerability scan. (Granted).

Interviews

- Scott Koegler | Security Intelligence | July 2017
  Employee Education Is the Key to Enhanced Protection for Energy Companies
  https://securityintelligence.com/employee-education-is-the-key-to-enhanced-protection-for-energy-companies/
- TAG Cyber | November 2018
  Gordon MacKay - CTO of Digital Defense (Full Interview)
  https://www.youtube.com/watch?v=5NA-73eJNlE
  Gordon MacKay chats with Ed Amoroso about the Digital Defense vulnerability management platform, the customers they serve, and future technology for the company.
- Eduard Kovacs | Softpedia News | Sept 2013
  Softpedia Exclusive Interview: Digital Defense CTO Gordon MacKay on SEA Attacks
  https://news.softpedia.com/news/Softpedia-Exclusive-Interview-Digital-Defense-CTO-Gordon-McKay-on-SEA-Attacks-385904.shtml

Publications

- Gordon MacKay | Express News | April 2015
  Guest Voices: Hotel Wi-Fi router security: Travel with caution
  https://www.expressnews.com/business/local/article/Guest-Voices-Hotel-Wi-Fi-router-security-Travel-6202849.php
- Gordon MacKay | CIO Review | April 2015
  The Employee - An Organization's Security Downfall or a Hidden Security Gem
  https://security.cioreview.com/cxoinsight/the-employeean-organization-s-security-downfall-or-a-hidden-security-gem-nid-6399-cid-21.html

Certifications

- **CISSP (Certified Information Systems Security Professional) | 2018–2024**

Education

Bachelor of Electrical Engineering, Computer Engineering Option
McGill University | Montreal, Québec, Canada | 1991

Languages

- **English**
- **French**