

Bill Davis

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SUMMARY

Software developer and cloud architect with 20 years of programming experience developing large scale distributed high-performance systems. Also, extensive experience as a developer for networked safety/performance critical programming of real-time embedded systems as well as Windows/Unix networking and user interface application software.

TECHNICAL SKILLS

- Cloud application development including using AWS, and Azure.
- Development of security and endpoint DLP solutions
- Kubernetes development including developing a helm charts, system monitoring and maintenance, upgrade solutions
- System-level and application-level software development in Linux, Android, Windows, and Mac OS
- Configuring and developing custom and commercial networking protocols, including the development of Wireshark dissectors in C and Lua
- Scripting languages (Python, Perl, Bash, Ruby)
- Higher level languages, including Python, C++, C#, and Java development in Windows and Linux environments.

EDUCATION

M.S. IN COMPUTER SCIENCE
Johns Hopkins University

May 2007
Baltimore, MD

B.S. IN MATHEMATICS AND COMPUTER SCIENCE
University Of Maryland

May 2002
College Park, MD

LITIGATION EXPERIENCE

- Carson Dominguez
Conducted signature analysis on submitted PDF documents, performing text extraction and structured data analysis. 2024-2025
- Jonathan E. Jaffe v. Adobe Inc.
Expert report in IPR regarding a hardware method for data stream authentication. 2025
- Croga v. Amazon
Croga v. IBM
Croga v. Fortinet
Croga v. Palo Alto Networks
Croga v. Cisco Networks
Serving as an expert for patent assertion, source code review for networking, virtual machine and VOIP related patents. 2024-2025
- DALE LEFEBVRE v. EXTRABUX, INC. Performed source code review of online platform for rebate redemption. 2024
- HeroDevs, inc v. DevIntent LLC. Serving as an expert for forensic analysis code history to identify potential copyright infringement. 2023
- Balaji K. Srinivasan v. Hashflow Foundations. Source code forensic analysis and opinion. 2023
- BEIJING MEISHE NETWORK TECHNOLOGY CO. LTD. V. TIKTOC INC. Clean room source code replacement analysis for copyright infringement. 2022-2023
- R2 Solutions LLC v. Cloudera, Inc.
R2 Solutions LLC v. Databricks, Inc. (**Deposed**)
R2 Solutions LLC v. American Airlines
R2 Solutions LLC v. FedEx Corporate Services, Inc.
R2 Solutions LLC v. Deezer
R2 Solutions LLC v. Charles Schwab Corp
Source code review and analysis to identity patent infringement for multiple patents related to authentication, MapReduce processing and structured search. 2022-2005
- Clinicomp International v. Cerner Corporation. Provided source code review for cloud health care electronics record system for the purposes of identifying patent infringement. 2022-2023

- Century Capital Partners IV, L.P. v. Marsh USA, INC. Provided system design review and consultation for AWS reference network architecture. Written opinion regarding standalone evaluation of deployed AWS system. 2021-2023
- Teradata Corp v. SAP SE, SAP Am. INC. Provided source code review for database and enterprise resource planning (ERP) products. Developed presentations and documentation identifying potential trade secret infringement. Performed reverse engineering on linux/windows applications to identify executed code paths. 2019-2021

EMPLOYMENT

SYSCALL 7, LLC
Principal Security Researcher

WOODBINE, MD
JANUARY 2016 - PRESENT

- Developed custom DLP tools integrated with Microsoft platform for endpoint data collection. Also integrated proofpoint and Microsoft Sentinel data into the solution. Developed customized reporting pipeline to automate workflow and enable analysts to search and analyze DLP data.
- Consulted for a large fortune 50 company on enterprise security architecture utilizing a full suite of Microsoft based technologies including Azure Information Protection, Azure Defender for Cloud, and Microsoft Cloud App Security platform to ensure information security for high value internal documents.
- Expert Witness for multiple patent infringement and trade secret lawsuits. Consulting for cases required a mix of in-depth trade secret review, analysis of run-time behavior, in-person and remote code review of large codebases.
- Led UI developer for a high performance real-time dataflow analytics platform, backed by the open source postgres database and processing 10M-100M transactions per day. Principally responsible for UI migration from a Rails 2 application to angular based front end utilizing Rails 4 and ROAR rails library. Additionally migrated back-end processing to integrate ElasticSearch and custom event processing code and included user interface unit testing through webpack and jasmine libraries.
- Co-founded the Online Disassembler (ODA) at onlinedisassembler.com and worked with a team of remote developers to develop the fundamental feature set of the website. Successfully deployed software in Django system for online binary analysis. Designed deployment system using virtualenv, Apache, WSGI and MySQL.

426 SOLUTIONS
Senior Principal Engineer

Columbia, MD
MARCH 2011 – JANUARY 2016

- Led development and integration effort for a team of 10 engineers building mission critical applications using large scale computing systems (over 8 racks with hundreds of compute nodes). Responsible for feature development, bug tracking, sprint planning and release engineering.

- Developed multiple deployed information systems utilizing Java/Groovy/MySQL/MongoDB and Accumulo Column Storage.
- Integrated Hadoop for MapReduce analytics and business orchestration. Worked on full life cycle analytics, including development, maven based build tools, and deployment to production systems.
- Designed ETL Systems capable of handling over 29 Million indexed documents. Architected a solution for the customer, and was responsible for building the user interface. Used a combination of Groovy on Grails with AngularJS/jQuery for display. Prototyped solutions using Twitter Storm and IBM InfoStreams.

BERICO TECHNOLOGIES
Senior Firmware Engineer

COLUMBIA, MD
AUGUST 2009 – MARCH 2011

- Developed ASP.NET, C# 4.0, and Oracle based application for indexing and retrieval of document corpus. Integrated BizTalk and other orchestration tools to develop ETL pipeline capable of handling tens of thousands of documents per day.
- Responsible for deployment and maintenance tasks on critical application components.

EVI TECHNOLOGY / EDO CORP. / ITT CORP.
Senior Firmware Engineer

COLUMBIA, MD
AUGUST 2006 – AUGUST 2009

- Analyzed software on Windows and a variety of embedded platforms with IDA Pro
- Designed and developed a portable architecture for an embedded, non-multitasking kernel comprising a device driver framework, network stack, and filesystem ported to a variety of embedded networking platforms.
- Developed device drivers for UARTs, compact flash devices, and network interface controllers (both wired and wireless).
- Developed system-level code for exception handling and virtual memory management.
- Developed bootloaders for a variety of platforms.
- Developed Wireshark/Ethereal dissectors for custom network protocols.
- Developed and maintained the SCons (Python-based) build system used for building our cross-platform code.

Naval Surface Warfare Station Dahlgren.
Computer Engineer

DHALGREN, VA.
JUNE 2002 – AUGUST 2006

- Member of the MK160 digital gunfire control system group. Group is sole developer for all 5 inch gun control software on Arleigh Burke class Destroyers.
- Responsible for embedded ballistics routines on PowerPC processors running VxWorks for 5 inch and 57mm naval guns.
- Developed real time data analytics software using Java and SunOS.