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I'm on the lookout for an opportunity to join a forward-thinking team that can tap into my software technical leadership and broad solution experience. With my strong work ethic, ability to learn quickly, and knack for thriving in fast-paced environments, I can hit the ground running and deliver immediate value. Let's collaborate and achieve great things together!

Summary

With over 30 years of experience as a software engineer, my expertise extends beyond technical knowledge. I have a comprehensive understanding of the entire software lifecycle, covering concept development, implementation, testing, delivery, and user acceptance. In fast-paced environments that demand problem-solving skills, whether it's creating innovative solutions, resolving customer issues, or equipping our team with the right tools, you can rely on my dedication, mentoring skills, and unwavering commitment to the company and customer mission. I have a strong passion for continuous learning and have embraced various platforms and roles, including developer, architect, team leader, and project manager. Throughout my career, I have gained diverse experiences in application development, device driver development, database applications, web development, and more.

Professional Skills

- C/C++, Java
- Python, PowerShell, bash, Ruby
- Rest, JPA, Hibernate
- HTML, CSS, Angular

- C#, .NET
- Regular Expressions (RegEx)
- Agile/Scrum, Jira, Redmine
- AWS EC2, Azure Information Protection

- Windows and Linux Platforms
- Spring, Spring Boot
- SQL, No-SQL
- Visual Studio, IntelliJ, Eclipse, Brackets, VS Code

- SQL Server, MySQL, SQLite, Sybase SQL Anywhere, LiteDB, MongoDB, DynamoDB
- Visual Studio Tools for Office (VSTO), OpenXML SDK
- Digital Rights Management (DRM/ADRMS)
- Bounds Checker, Purify, lint, RedGate ANTS

- Standard Template Library (STL)
- Windows Desktop Applications, Windows NT Services, Backend Services
- SVN, ClearCase, git, BitBucket
- Visual Basic 6.0 and Microsoft Visual FoxPro

- Classic ASP
- Microsoft Detours/Windows Hooking
- CruiseControl, Jenkins

Employment History

Amazon AWS/EC2 — Herndon, VA
January 2020 - Present
Senior Software Engineer (SDE II)

I hold a senior position on the **EC2** Zonal Interface Management (ZIM) team. ZIM plays a critical role in managing all network interfaces and IP addresses for **EC2**. It operates at a low level and relies on **AWS** technologies such as **DynamoDB** and **S3**. Our development environment primarily consists of **Linux**, and we utilize **Java**, **Ruby**, and **Scala** for coding purposes.

Implemented a code **refactoring** initiative to enhance service decoupling, resulting in improved modularity and maintainability. The refactoring process involved utilizing **Java** for development, creating automated **API tests** in **Ruby**, and performing blackbox automated testing using **Scala**. This approach ensured robustness and streamlined the testing process.

Drove substantial **performance enhancements** and extended the **scalability** of service hosts across multiple **EC2** regions by consolidating services and reducing round trips. These optimizations resulted in significant performance improvements that caught the attention of top engineers and managers within **AWS/EC2**. The demonstrated impact of these enhancements showcased the ability to unlock greater efficiency and scalability within the infrastructure.

Collaborated with cross-functional teams to implement an approach for enabling user tagging of **EC2** resources during creation, spanning across the entire **EC2** infrastructure. In one of my initial assignments at Amazon, I took on the responsibility of creating test plans for this project, leveraging the **AWS CLI**. Additionally, I provided assistance to cleared engineers in executing these test plans within secured regions.

Modified an existing public API to incorporate **idempotent** support, ensuring reliable and predictable behavior. This undertaking involved close collaboration with multiple teams involved in releasing new features to the public. I worked closely with documentation, security review, test planning, and penetration testing teams to ensure seamless integration. The project involved making architectural changes to both new and legacy systems, utilizing development languages such as **Scala**, **Ruby**, and **Java**.

Effectively transitioned into the **On-Call rotation**, taking on the responsibility of providing critical support and resolving urgent issues. This role required me to be available around the clock, demonstrating my commitment to maintaining the stability and availability of the systems. By promptly addressing and resolving complex incidents, I played a pivotal role in ensuring uninterrupted service for our customers and earned the trust and recognition of my peers and superiors.

Skills Assessments
Ashburn, Virginia
November 2019 - January 2020

In November 2019, GigaTrust unfortunately went bankrupt, leading to the closure of its operations. After nearly 11 years with GigaTrust and 12 years with EMC, I found myself out of work for the first time in almost 23 years. During this time, I focused on upgrading my skills and exploring new technologies.

I dedicated my efforts to studying **cloud computing** and **full-stack web development**. Additionally, I refreshed my knowledge of **Python**, **C++ 2.0**, **Java (including Spring and SpringBoot)**, **.NET**, **REST**, **JPA**, **Hibernate**, **HTML**, **CSS**, and **Angular**. These efforts allowed me to stay up to date with the latest industry trends and expand my skill set.

The closure of GigaTrust became a turning point in my professional journey, providing an opportunity for personal growth and skill development.

GigaTrust
Herndon, Virginia
March 2009 - November 2019
Software Development Manager / Principal Software Engineer

At GigaTrust, I joined as a **technical lead** responsible for overseeing their desktop client applications. In this role, I **managed** a team of up to 6 individuals, providing support for a file system **device driver**. I played a key role in refactoring a monolithic **VB6** client application into a collection of reusable **APIs**, **Windows Services**, and new client and server applications developed in **C/C++** and **C# .NET**.

GigaTrust's primary objectives was to enhance our customer's **data security** by safeguarding them against inadvertent leakage of sensitive information. Through the implementation of these applications and services, we were able to provide protection and mitigate potential risks for our clients.

Led a team of 5-6 developers in the development and support of a large client application written in **C++** and **Visual Basic 6 (VB6)**. Implemented a **refactoring** effort to transform the product into a set of **APIs** using **C#** and **C/C++**. This architectural shift allowed for code sharing across products and eliminated the need for the device driver.
- Improved user experience, improved reliability, and simplified maintenance.
- Reduced the codebase size by 90%.
- Increased efficiency through code refactoring, resulting in a team size reduction from 7 to 1.
- Leveraged this new code reusability for accelerated development of new products.

Reorganized the code base into seperate manageable libraries and services and established a **source control** branching model using **SVN**. Implemented **continuous integration** with **CruiseControl** through **automation** with **NAnt**, **bash**, and **PowerShell scripts**. CruiseControl was later ported to **Jenkins** and **SVN** was replaced with **Git**.
- These code improvements dramatically improved maintainability and support enabling developers to dedicate their efforts to other projects, such as the development of new Android and Apple iOS apps.
- Enhanced the maturity of the product and introduced software development tools that adhered to best practices.

Played a key role in driving the adoption of **Agile/Scrum** methodologies for application development to enforce **Digital Rights Management (DRM)** for our customers.
- Manipulated the behavior of Adobe Reader, Office applications, and other Windows applications by injecting DLLs to change the applications behavior to enable licensing and content protection
- Used technologies such as **Microsoft Active Directory Rights Management (ADRMS)**, **Microsoft Detours Library**, **Windows Hooks**, and **Office Plugins** with **Visual Studio Tools for Office (VSTO)** to enforce content protection.

Implemented a process for delivering code to the quality assurance group, including a standard for regularly scheduled drops, **unit tests**, and **test plans**.

This approach improved the efficiency of our development cycle and ensured a higher level of code quality. By establishing clear guidelines and milestones, we were able to effectively track and manage the progress of each release with actual measurements, facilitating smoother handoffs to the QA team. The introduction of comprehensive **unit tests** and **test plans** enhanced our testing strategy, allowing for accurate validation of software functionality and increased confidence in our deliverables.

Coordinated teams to address critical company or customer challenges promptly.
- Assembled a dedicated team and successfully developed a brand-new system from scratch within in just 2 months, surpassing the previous team's two-year struggle to meet the project requirements.

Led the migration effort to transition the version control system from **Redmine** to the industry-standard **Jira**, ensuring a seamless and efficient process.

Played a pivotal role in facilitating the smooth adoption of **git** as the new version control system on **BitBucket**, enhancing our code management practices. This initiative showcased my meticulous attention to detail and technical proficiency while ensuring uninterrupted project operations and optimizing the team's productivity.

DeMay Enterprises, LLC
Ashburn, Virginia
March 2003 - March 2011
Owner

Created **Discount Casino Gear** as a successful side business venture. Employing web development tools like **Microsoft FrontPage**, **Adobe Dreamweaver**, and **Microsoft Visual Web Developer**, I meticulously crafted the website from scratch. Originally built with **Classic ASP and VBScript**, **HTML**, and **CSS**. I later undertook a significant refactoring effort, migrating the site to **ASP.NET** framework. Backend operations were powered by **Microsoft SQL Server**.

The website generated a half a million in annual revenue within six months of its initial launch. This remarkable success highlighted the effectiveness of my strategic planning, continuous learning and diligent execution.

The website emerged as the top retail website in its market, capturing the loyalty of customers seeking casino gear products. My commitment to delivering exceptional products and an outstanding user experience propelled me to the forefront of the industry.

Achieving unrivaled efficiency and productivity, the website operated as a fully automated system, generating new content through scripts written in **VBA**, **C/C++**, and **C#**. **Regular Expressions (RegEx)** was used in scripts that ran throughout the day to scrub competitor's websites and track how they were pricing products. This innovative approach enabled me to stay ahead of my competition, constantly refreshing my offerings and pricing.

Recognizing the immense potential and value I had created, I strategically transitioned the website to the **Volusion** platform. This transition not only enhanced my capabilities but also positioned me for a successful sale. In March 2011, I sold the website for a profit.

EMC
Alexandria, Virginia
Now a subsidiary of Dell
February 1997 - March 2009
Principal Software Engineer

Embarking on my journey with Softworks, a storage company that later became part of the EMC family, marked an exciting chapter in my career. As a key contributor to their internal support systems team, I harnessed my expertise in **Visual FoxPro** to spearhead the development of internal applications. These solutions empowered the administrative and sales teams, streamlining their processes and fueling their success.

Eager to expand my horizons and broaden my technical repertoire, I embarked on a self-guided journey to master **C/C++**. Through determination and countless hours of learning, I acquired proficiency in this programming language. This newfound expertise proved instrumental in propelling me towards the product division of Softworks.

Utilized the power of **Web Based Enterprise Management (WBEM)**, **Common Information Model (CIM)**, and **Storage Management Initiative (SMI)** technologies to engineer **C++** applications deployed across various **Windows** and **UNIX** platforms. These innovative solutions enabled seamless management, proactive alerts, and streamlined discovery of Storage Area Networks, empowering enterprises to optimize their storage infrastructure effectively.

Assisted a team grappling with challenging requirements. Through proactive code refactoring, I revolutionized their approach to managing and reporting on storage system arrays. Furthermore, I established a process for integration testing with the enterprise system on a predictable basis. The impact was transformative:
- Improved performance by a staggering 3,951% and slashed memory consumption by an impressive 2,027%.
- Efficiency gains achieved through code and process enhancements led to a remarkable team reduction from 6 to 2 skilled engineers, enhancing resource allocation and driving cost savings.

Personally conducted training sessions for all EMC engineers in Alexandria, Virginia, on the proper techniques to maintain large data structures utilizing **Standard Template Library (STL)**.

Developed a Windows **device driver** capable of efficiently managing storage and providing comprehensive reports on system resources. This **device driver** empowered users to harness the full potential of their systems, elevating their productivity and enabling seamless operations.

Steered a highly skilled team of 7 brilliant minds proficient in **C#**, **C/C++**, **MVS**, and **Java** to architect an application framework that became the backbone of EMC's Control Center client applications. This revolutionary framework spanned across diverse platforms, including **Windows**, **AIX**, **HP/UX**, **Solaris**, **Linux**, and **MVS**

Orchestrated the integration of two prominent companies and their respective products, leveraging the power of **Java**. For my contributions, I was honored with EMC's prestigious **Most Valuable Player** award among a team of 200 talented engineers in August 2006, recognizing the impact of the project on EMC's success.

Pioneered the development of a **C#** plugin that marshaled data between EMC libraries written in **C/C++** and Microsoft's **Systems Center Operations Manager (SCOM)** application. This integration streamlined operations and fortified the interoperability of EMC and Microsoft technologies, amplifying their joint capabilities.

Education

Post Graduate Program in Cloud Computing
University of Texas at Austin
Texas McCombs School of Business
Currently enrolled to fill in the few remaining gaps in my existing AWS knowledge.
The expectation is to obtain **AWS** and **Azure certifications** and get exposure to other cloud providers such as **Google and IBM**.
Current GPA 4.33

March 2023 - Present

Spring Boot 3, Spring 6, Spring REST API, Spring MVC, Spring Security, Thymeleaf, JPA & Hibernate
udemy.com/course/spring-hibernate-tutorial/

Present

React Styled Components
udemy.com/course/react-styled-components/

April, 2023

Deploying Java Spring Apps Online to Amazon Cloud (AWS)
udemy.com/course/deploy-java-spring-apps-online/

March, 2023

Create web app with Angular 12, .NET Core Web API & Mongo DB
udemy.com/course/create-web-app-with-angular-12-net-core-web-api-mongo-db/

March, 2023

Strayer University
Completed 4 years of college in one year by teaching myself the material and testing out of classes.
Summa Cum Laude (4.0 GPA)

March 1998 - March 1999

Certifications

Currently pursuing AWS and Azure Certifications — In Progress

Microsoft Certified Solution Developer (MCSD) — April, 1998

Microsoft Certified Professional (MCP) — March, 1998

Patents

US Patent 7,233,957 B1
"Method and Apparatus for identifying and Processing Changes to Management Information"

June, 2007

Publications

Speed Up Client-Server Applications with Server Side Cursors (Part Two) — September, 1999

Client-Server Development in the Real World (Two Part Series) — May, 1999

Put Microsoft Graph to Work in Your Applications — May, 1997

Understanding the Composite Class Hierarchy — March, 1997

Use Visual FoxPro to Send and Receive E-Mail and Faxes (Part Two) — January, 1997

Use FoxPro to Send E-Mail Messages (Two Part Series, Cover Article) — December, 1997

Get the Most Up-To-Date Data with DDE Advise — August, 1996

Run Applications by Remote Control — May, 1996

Hobbies and Interests

- Private Pilot
- Coaching Kid's Sports
- Piano, Organ, Keyboards
- Banjo
- Football
- Poker
- Guitar
- Strength Training
- Snow Skiing
- Musical Performing
- Harmonica
- Wood Working, Handy Man