# </> Karl Christopher Alcorn

Software [Developer | Engineer | Architect]



## **CONTACT**



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#### **SKILLS** [YEAR FIRST USED]

.NET Core [2017] Angular [2023] ASP.NET [2017] Asterisk PBX [2012] AWS [2020] Azure [2023] Bash [1998]

C# [2006] C++ [2003] CSS [2004]

DevOps/CI/CD [2020]

Docker [2021] Flutter/Dart [2021]

HTML [1998] Java [2004]

Linux [2000]

JavaScript [1998]

Magento [2012]

MySQL [2001]

Node.js [2020] Perl [1999] PHP [2000]

PostgreSQL [2008] PowerShell [2009]

Serverless [2020]

React [2018]

Redis [2020]

Silverlight [2015]

SQL Server [2001]

TypeScript [2020]

Visual Basic [1998] **VB.NET** [2006]

WCF [2015]

Web API [2015]

Windows Server [2001]

WordPress [2006]



# **CERTIFICATIONS**

CompTIA Security+ CompTIA Project+ CompTIA Network+ CompTIA A+

Microsoft Certified Professional

MTA 361: Software Dev. Fundamentals

MTA 365: Windows Server Admin. Fundamentals

MTA 349: Windows OS Fundamentals

CIW v5 Database Design Specialist

CIW JavaScript Specialist CIW Web Design Specialist

CIW Web Development Professional

CIW Perl Specialist

CIW Web Foundations Associate



## **EXPERIENCE**

#### Principal Software Architect @ Alcorn Technologies, LLC.

May 2019 - Present

- Contracted as Chief Software Architect for a SaaS medical start-up, managed and mentored an international team, and assisted in scaling their software offering nationwide.
- Performed due-diligence audits of both source code and development teams for multiple start-ups and enterprise clients, including some collaboration with both Microsoft and IBM software developers.
- Contracted as Director of Technology/Interim CTO on a venture involving the American College of Gastroenterology, with an emphasis on auditing their MVP, assessing and managing the dev. team, and identifying and protecting their intellectual property.

- Contracted by a Cloud AI SaaS startup using LLMs to automate medical insurance claims, to oversee the process of turning an MVP into a production ready system capable of scaling nationwide.
- Created a two-way ETL system to synchronize HIPAA protected data stored on-premises to/from the Cloud in a multitenant environment.
- Created several small POC projects for the US Department of Veterans Affairs to demonstrate the utility and feasibility of modern technologies such as Angular, Azure Functions, Cosmos DB, etc.
- Modified long-polling distributed systems to instead use Web Sockets to connect to the Cloud in order to reduce load and costs.
- Created a brandable and highly reusable white-label Mobile App for use by labor unions using Flutter/Dart.
- Implemented DevOps policies including CI/CD pipelines using Bitbucket, GitHub, and GitLab.
- Reverse-engineered a salted security hash to allow insertion into a third-party MySQL database as if the original software were performing the INSERT operations.

#### Automation Analyst @ Century Aluminum Co.

Oct 2017 - May 2019

- Lead efforts to consolidate and modernize software infrastructure across three plants.
- Created a web application for monitoring multiple carbon furnaces, valued at \$30M+ each, using React, ASP.NET MVC, Web API, SQL Server, etc.
- Created a web application for Layered Process Audits to allow management to track productivity at multiple levels, identify discrepancies, and opportunities for cost savings.
- Maintained and updated legacy systems, including working with interfaces to hardware such as crucible scales, using VB.NET, Java, PHP, Apache Tomcat, MySQL, etc.

## Software Dev. > Senior Software Dev. > Lead Developer @ SS&C Technologies, Inc. Aug 2015 - Sep 2017

- Implemented new features and bug fixes on C/C++ financial software with 30+ million lines of code.
- Created a modern, responsive, Corporate Actions web-based product using C#, ASP.NET, Web API, WCF, SQL Server, etc.
- Reduced build times by 75% by scripting and automating the 120+ step build process.
- Acted as SCRUM Master: held daily meetings, retrospectives, and worked with product owners to create user-stories and estimates.

#### Systems Consultant / Manager @ CGM Computer Consulting, LLC.

May 2006 - Jul 2015

- In charge of all day-to-day operations across all disciplines (dev, networking, tech support, etc.)
- Technical lead for all in-house software development efforts.
- Created hundreds of desktop and web applications per client specifications, including desktop software, basic websites, WordPress websites and custom plug-ins, e-commerce and membership websites, etc.

IT Manager @ Web King Internet Services, Inc.

Jul 2004 - May 2006

Systems Consultant @ CGM Computer Consulting, LLC.

Jul 2002 - Jul 2004

IT Team Member @ Red Geranium Enterprises, Inc.

Jun 2001 - Jul 2002

