

Chris Fletcher

Software Engineering Manager

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As a software engineering manager with over two decades of experience, I have delivered innovative software solutions for various domains and platforms.

I started my career in electronics and transitioned to coding, working on projects ranging from paper mill automation and language conversions to full-stack web and desktop applications. For the last 10 years, I have been an integral part of InFlight (now Skuid), a company that modernizes legacy web-based enterprise software. I have advanced from a senior engineer to a solutions architect, leading development teams and facilitating InFlight's acquisition. Now, I manage the engineering department and oversee the software development lifecycle.

WORK EXPERIENCE

Software Engineering Manager

InFlight 2011-2021 – Skuid 2021-Present

InFlight Corp / Skuid (Skuid acquired InFlight)

At Skuid, initially, my primary job was to work on integrating InFlight into Skuid. Since Skuid apps are primarily built with XML underneath, we figured out a way to dynamically derive how our InFlight angular apps are built and compiled on the fly. After this was well underway, I began leading the team as Engineering Manager responsible for:

- Interviewing and hiring amazing engineers and handling attrition
- Developing and leading training for team members.
- Establishing software development goals to meet core objectives.
- Creating and managing budgets and distribution of resources.
- Collaborating on coding and programming for various projects.

as well as on a day-to-day basis:

- Managing the technical aspects of the project and solving any problems.
- Aligning the team and the executive leadership on the project goals.
- Supporting the creation and management of the project schedule.
- Delegating and tracking project tasks via scrum-ban method.
- Overseeing onboarding of new employees and continued development of the team.
- Conducting routine 1:1's with employees with empathy and feedback.

At InFlight, I have worn many hats since I joined when it was a young startup. I worked with/ the company founder as his first engineer to build out and further the product. Initially, the product was a reverse proxy that would make requests to PeopleSoft to run HTML transformation rules, which would modify the request/response content to allow for SSO and surfacing in an iframe. We created a group of web parts in SharePoint 2010, 2013, 2019, and o365 that would allow users to add the URL from PeopleSoft to show specific pages that surfaced inline within SharePoint. Over time, I played a key role in evolving the product to the point where we would extract the form data from systems with older UI like PeopleSoft and return JSON data objects, which could be consumed by angular projects to offer our customers modernized, responsive, mobile friendly editions of their underlying application.

I was responsible for finding innovative ways to integrate the product into various customer systems, gathering requirements, creating a POC, and leading a team of engineers to complete the integration while staying on time and schedule. Some notable projects include:

- Re-wrote the first in-house edition of our framework using Angular. This was to allow us to make use of an existing well-supported framework that folks would likely already know and could ramp up quicker as developers. Doing this allowed us to hire more developers and get results much quicker.

- Wrote a Chrome extension allowing users to build out their data object from the HTML page via drag/drop, no code. It would then write all of the necessary code in typescript for them to use in their project, reinforcing best practices and reusable code. It would allow them to test the code on the fly and verify their data against a model/schema.
- Created an application that automatically detects data on a web page (Gideon Taylor Forms), including element position. It would collect that data, generate our extraction scripts, and then tell our angular application how to build itself. You could point our app at these pages and automatically get a modern responsive edition on the fly instead of coding each page.
- Creating ServiceNow applications with various custom widgets that work with SN data, contextual help, and UI from InFlight
- Creating SharePoint solutions with various custom web parts and configurations allowing for SSO and data integration
- Created a curriculum for training new customers to use the product so they could create their content and taught several courses on the subject.
- Created video training via Camtasia to help customers get a jumpstart in learning to use the product.

Senior Software Consultant

2010 – 2011

Velocity Partners (Industrial Scientific), Pittsburgh, PA

As a contract developer, I wrote an ASP.NET application with front-end and back-end field and business rule validation. To ensure code reusability and extensibility, I created a client-side framework using JS/jQuery that established good patterns. Additionally, I developed several jQuery plugins to improve the record-adding experience for the UI and to enforce business rules.

Since the application was to be offered in multiple languages, I localized the ASP.NET controls/pages using built-in .NET techniques. To handle JS localization, I created a highly performant HTTP handler that used a regular expression search/replace pattern. I applied a similar approach to ASP.NET pages that contained static HTML.

Senior Software Engineer

2008 – 2011

Innovation Asset Group, Wilsonville, OR

After being recruited for full-time work by IAG, I joined their team to work on their main product. The product was initially written in VBScript and partially converted to JavaScript with a custom .NET 2.0 Windows service-based backend for data access, security, and business rule handling. However, there were many challenges with the original design, particularly concerning scalability. The original designer was loading all data into memory and using a proprietary data transfer format.

My task was to help finish converting portions of their core application from VBScript/ASP to JavaScript/ASP.NET. I also made recommendations for improvement where required. I noticed that the engineers were writing everything themselves from scratch in JavaScript, which gave very little chance for code reuse and led to more buggy code. To address this issue, I introduced jQuery AJAX and the Telerik AJAX Control Suite. These technologies allowed me to make significant improvements to the project.

Later, I designed an architecture where jQuery communicated with web methods and formed an abstraction layer between the UI and the backend code. This allowed us to begin replacing and reworking the backend code without immediately affecting the currently running code. During testing, we could switch from the old version to the new one upon final QA approval and move on to the next area of improvement. This approach helped us make server-side improvements as we worked on the Windows services to remove unnecessary caching. On the client side, I used AJAX-based lazy loading to improve performance and usability.

Senior Software Engineer

2008

PacifiCorp, Portland, OR

This was a short contract where I created an MS Access application for interoffice use that tracked engineering information from throughout the area and then reported on it.

I was also involved with re-architectural plans for converting legacy applications to ASP.NET using the Telerik control suite.

Senior Software Engineer

2006 – 2008

UPS Supply Chain Solutions, Portland, OR

I acquired a contract from Matrix Information Consulting, Inc. for UPS Supply Chain Solutions. I began working with them to convert a major supply chain solution software package called Gemini from VB6 to .NET. I was involved in this project from the ground up. I was tasked with analyzing the existing software, converting existing and new business requirements to functional and technical design documents, and hiring additional contractors. Our goal was to create a better Gemini using .NET. To achieve this, I created a project plan with multiple stages so that we could put out new features for Gemini each quarter.

We used .NET's interop and COM capabilities to incorporate new features into the VB6 Gemini application, such as multithreading, web services, OneClick updates, and using SMO for database communication and manipulation. We also replaced MSDE with SQL Express 2005. We replaced the SOAP Toolkit with .NET web services and redesigned their user interface and off-line rating system from the ground up.

I gained much experience converting their VB6/COM/COM+/MS SOAP toolkit API to .NET web service-based API and supervising the transition for several major, already connected clients.

I was also involved in the re-architecture of their online suite of applications called MyFreight. The application was entirely written in Classic ASP, and my task was to convert it to ASP.NET 2.0. I worked on the architectural design for this and oversaw its progress, leading a team of engineers.

Later, I worked on a project to replace the single sign-on technology using MS Site Server with a custom in-house design using ASP.NET and ADAM LDAP for authorization and authentication. I designed this from scratch and implemented it.

Senior Software Engineer

2005 – 2006

Overland Agency, Portland, OR

Excited to land a gig at a web app agency, I helped them finish a major .NET web application project that I took over after their former employee had left the company. The company was behind schedule and losing money, and I quickly finished the project using C# ASP.NET 2005/SQL Server 2005, T-SQL, CSS, HTML, and Photoshop. I worked with their project managers, designers, and other engineers while coding the backend for this application, including a feature-rich CMS system that allowed them to change form input fields and design. The project was www.sunstone.com. Since my coding design was well documented and intuitive, the project was taken over by their staff, where they could add even more features easily.

After working on that project, I was promoted to Lead Developer and began a new project where I could design the backend from the ground up. I designed a CMS structure that the company uses repeatedly without having to reinvent the wheel every time they create a new web application for a client.

In addition to my development work, I coordinated outsourcing to India for various clients and specific parts of the new CMS. I also introduced AJAX methodologies to the engineering team and improved the look and feel of many future web applications. Finally, I coordinated with clients and often worked on-site with their engineers to implement code specific to their needs and environments.

Software Engineer III

2001 – 2005

Panther Systems, Vancouver, WA

Panther Systems creates software for paper mills, and I worked on several of their VB6 and, later, NET-based Windows applications. These included applications such as Panther Reports, Helpdesk Manager, Timekeeper, TestCentral Web, Roll Line Supervisor, Process Analyzer, and MillTools. Most of these applications communicated with paper mill machinery using OPC/DCOM -> Serial/BCD/TCPIP services, which allowed for real-time analysis and control.

Senior Systems Manager/Software Engineer

1996– 2001

Retired Persons Pharmacy/Express Scripts, Vancouver, WA

Managed all aspects of the IT department for a mail-order pharmacy branch, including networking, microcomputer configuration, printer maintenance, VAX/VMS maintenance, and employee technical support. Key achievements:

- Developed several applications using VB6 and MS Access that interfaced with the VAX/VMS system to provide a more user-friendly Windows-based front end. This was necessary because corporate was not allowing changes to the VAX system then.
- Created dynamic MS Access-based reports for creating container labels, invoices, etc., which replaced the previous serial dot matrix printing method. This resulted in a significant increase in speed and efficiency.
- Designed and developed a microcontroller-based serial network system that allowed pharmacists to quickly scan drugs and orders and verify proper match before distributing to customers in a warehouse environment.
- Automated several inventory tasks using custom software.
- Wrote a point-of-sale system with a SQL Server database backend that communicated with the VAX system to share data between the VAX and Windows environments.

Module Technician III/LAN Technician

1994– 1996

Intel, Beaverton, OR

Responsible for all maintenance areas for two machines: Westech Planer and Ontrak Scrubber. I worked with a team of engineers to improve and maintain uptime for production.

I worked as a LAN technician for one year, assisting with the installation of several workstations in the new Ronler Acres facility and with the transition from static IPs (Windows 98) to DHCP (Windows NT 4.0).

EDUCATION

Western Governors University, Houston, TX

Bachelor of Science – Software Engineering

Umpqua Community College, Winchester, OR

Associate of Applied Science in Digital Systems

Associate of Science in General Studies

CERTIFICATIONS

CompTIA Project+

Issued May 2023

Credential ID: COMP001022224842

Amazon Web Services Cloud Practitioner

Issued May 2023 – Expires May 2026

Credential ID: 2K8JBJGK8FFQK9W

ITIL Foundation Certificate in IT Service Management

Issued Apr 2023 · Expires Apr 2026

Credential ID: GR671512311CF

Microsoft® Certified IT Professional

Issued Jul 2016

Credential ID: 44L4EF-868F58

Microsoft® Specialist: Programming in HTML5 with Javascript and CSS3

Issued Jul 2016

Credential ID: 55334A-EACR4D

Microsoft® Certified Professional Developer: Web Developer

Issued Apr 2010

Credential ID: EE4T49-EE65AD

SKILLS & OTHER

Management Core Competencies: Financial management and budgeting, Engineering collaboration/integration, Process and quality improvement, Change management, Analytics and strategic decision-making, Product and program development, Fostering innovation, Leadership decision support, Building high-performing teams, and collaborative and inclusive relationships.

Management Utilities: ScrumBan, Agile, Slack, JIRA, Confluence, Source Versioning, Asana, Salesforce, SmartSheets

Languages: Javascript, TypeScript, C#, VB.NET, ASP.NET, ASP.NET Core, ASP, VBScript, HTML, XML/XSLT, JSON, T-SQL, VBA for Access, UML

Libraries/Control Suites: Angular, AngularJS, Bootstrap 3+, Sass/Scss, KOA.js, ExpressJS, Passport.js, jQuery, PWA jQuery UI, Electron, jQuery Mobile, Prototype, YUI Library, Ext JS, JSDoc, Telerik r.a.d. ASP.NET AJAX Control Suite, Dev Express Control Suite, Telerik Winforms Control Suite, Winnovative Software Excel Control, JSON.Net, Infragistics Excel Export, PDF4ML HTML to PDF Component

Software: Visual Code, WebStorm, Visual Studio .NET, Aptana Studio, MS SQL Server Management Studio, Toad, InstallAware, NDoc, Dotfuscator, Dreamweaver MX, Crystal Reports, Photoshop, Office Suite including Visio and Project, OLE for Attachmate KEA!, MS SOAP Toolkit, Microsoft Enterprise Application Blocks 3.1/4.0 (Data Access, Exception Handling, Logging and Security), Postman

Reporting: HTML, Crystal Reports, Telerik Reporting, MS Access

Version Control: BitBucket, Git, TFS, Visual Source Safe, Subversion, VisualSVN

Technologies: NodeJS, SSO (SAML, JWT, OAuth, ADFS), Xamarin, DAO/ADO/ADO.NET, LINQ, Web Services, SOAP, SMO, Encryption, T-SQL, OLE Automation for Office Suite, DDE, COM/COM Interop, DCOM, COM+, OPC, Serial Communication(networking and direct communication), MSMQ, IIS, NG, LDAP, ADAM

Databases: PostgreSQL, MongoDB, SQL Server, MySQL 5.0/5.1, Oracle, MS Access, SAP, Exchange Server

Development Methodologies: Agile, Scrum, Kanban, CircleCI (CI/CD)

Platforms: Windows Desktop, Windows Server, Ubuntu