

Sakthikumar Chandrasekaran

Software Developer | Permanent Resident

271 Savoy Cres, Sherwood Park, AB, T8H 3A8

<https://sakthi-portfolio.azurewebsites.net> | csk.sakthi@gmail.com

+1 780-708-2463 | www.linkedin.com/in/sakthikumarchandrasekaran

SUMMARY

- Results-driven **Software Developer** with over **15+ years of hands-on experience** in software and ERP development for the **Manufacturing, Public Sector** and **Healthcare** domains
- Strong expertise in **ASP.NET Core, C#, SQL Server, and React**, with hands-on experience in system design, full-stack application development, debugging, performance optimization, and system integration
- Proven experience working with **enterprise-grade ERP architecture** and managing the **full Software Development Life Cycle (SDLC)** using Agile methodologies
- Skilled in **database design and optimization** using **SQL Server and Oracle**, with extensive use of **stored procedures**, query tuning, and data integrity best practices
- Experienced in **reporting and data visualization** using **SSRS and Power BI** to support data-driven decision-making
- Recognized for improving performance of a **high-traffic ASP.NET application**, achieving a **30% reduction in load time**
- Passionate about building reliable, maintainable software solutions that combine **engineering principles, DevOps practices, and emerging technologies** to deliver measurable business value
- Experienced in leading **cross-functional development teams** and deploying cloud-based solutions on **Microsoft Azure** with **CI/CD pipelines**, secure architecture, and scalable design principles

EDUCATION

EMPLOYMENT

University of Alberta

Edmonton, Canada

- ⊕ MEng in Engineering Management
- ⊕ Sep 2020 - Aug 2022
- ⊕ GPA: 3.5/4.0

Manufacturing Engineer - Operations Support

TAQA Drilling Solutions

Nov 2022 to till date | Edmonton, Canada

- Lead a team of 6 developers supporting enterprise manufacturing applications, including CGMS (Cougar Global Management System) and TAQA intranet tools.
- Design, develop, and maintain applications using **.NET (C#), ASP.NET, Blazor, and RESTful APIs**.

Pondicherry University

Chennai, India

- ⊕ MBA in General
- ⊕ Jan 2011 - Dec 2013
- ⊕ CGPA: 7.2/10.0

- Develop and optimize **SQL Server** databases, stored procedures, and queries to support high-volume operational data.
- Deploy and manage applications in **Microsoft Azure** (App Services, Azure SQL, environment configurations, CI/CD pipelines).
- Integrate cross-functional systems for Engineering, Quality, and Manufacturing to improve workflow automation and data traceability.

Anna University

Chennai, India

- ⊕ BEng in Mechanical Engineering
- ⊕ May 2004 - Apr 2007
- ⊕ CGPA: 7.6/10.0

- Enhance NCR and ECN processes through system automation, audit logging, and workflow improvements.
- Perform root cause analysis and production issue resolution using SQL diagnostics, application logs, and performance monitoring tools.
- Implement secure coding standards, role-based access control, and Git-based version control with structured code reviews.

SKILLS	Assistant Manager - Software Customization	
<ul style="list-style-type: none"> • Language 	Durabuilt Windows and Doors	May 2022 to Oct 2022 Edmonton, Canada
<ul style="list-style-type: none"> • C# • Java • VB.net • VB 6.0 • JavaScript 	<ul style="list-style-type: none"> • Led customization and support of internal ERP and production systems using .NET (C#), ASP.NET, and SQL Server. • Translated business requirements into technical specifications and developed enhancements, APIs, and workflow automations. • Managed sprint planning, release schedules, and defect tracking using Agile methodology. • Optimized SQL queries, stored procedures, and database performance to improve system responsiveness and data accuracy. • Conducted code reviews, supported UAT, and implemented version control using Git to ensure stable production releases. • Monitored application performance, troubleshoot production issues, & implemented continuous improvements to reduce downtime and operational bottlenecks. 	
<ul style="list-style-type: none"> • Framework 		
<ul style="list-style-type: none"> • .NET Core • ASP.NET Web API • .NET Framework • ASP.NET 		
<ul style="list-style-type: none"> • Web Technology 	Congruent Info Tech	Mar 2015 - Nov 2020 Chennai, India
<ul style="list-style-type: none"> • ASP.NET MVC • HTML5 • CSS • Bootstrap • React 		
<ul style="list-style-type: none"> • Database 	Microsoft SQL Server	
	MySQL	
	MongoDB	
	PostgreSQL	
	Oracle	
	Microsoft Access	
<ul style="list-style-type: none"> • Data Visualization 	Tableau	
	PowerBI	
CERTIFICATIONS	Software Engineer - CAD Customization	
	Flowserve Corporation	Aug 2013 to Mar 2015 Chennai, India

SOFTWARE PROJECTS (Selected)

Project Name: Midmark Manufacturing System

Client: Midmark Corporation, Ohio, USA

Description: Led the team of software developers to design and develop a centralized ERP-style manufacturing system to streamline production planning, task scheduling, inventory control, and shop floor visibility across Midmark's global manufacturing units. The system integrated key ERP modules such as Work Order Management, Bill of Materials (BOM), Routing, Resource Allocation, and Shift Scheduling. Real-time dashboards were implemented to monitor production KPIs, identify bottlenecks, and improve on-time delivery metrics.

Key Impact: Improved production scheduling accuracy by 35%. Reduced material wastage and overstocking by integrating dynamic inventory tracking with BOM reconciliation. Increased on-time order fulfillment by 22% through optimized job sequencing and resource planning

Technologies: .NET Framework, C#, ASP.NET MVC, WPF, Entity Framework, SQL Server, SSRS, SharePoint

Project Name: CAD Automation Tool for Engineering Drawings

Client Details: Flowserv Corporation, Chennai, India

Project Info: Designed and developed an internal desktop tool that automated the generation of 2D manufacturing drawings and 3D assembly models for mechanical seals and pumps. Integrated with SolidWorks and Autodesk Inventor using .NET-based API programming. The application dynamically created BOMs (Bill of Materials), BOQs (Bill of Quantities), and BOEs (Bill of Equipment) based on part parameters and drawing templates

Key Impact: Reduced drawing preparation time by 70%, improving overall project turnaround. Eliminated manual errors in BOM generation, saving an estimated 1,200 man-hours annually and enhanced accuracy in engineering documentation and reduced rework costs by 15%

Technologies: C#, .NET Framework, SolidWorks API, Autodesk Inventor API, AutoCAD, XML, VBA, WPF

Project Name: Employee Leave Management System

Client Details: TechSolutions Inc., USA

Project Info: Developed a cloud-integrated leave management platform with self-service portals for employees, real-time reporting for HR, and Azure AD-based authentication. The application featured leave tracking, policy enforcement, and payroll system integration

Key Impact: Reduced manual leave request handling by 80% and enhanced HR visibility into trends through custom Power BI dashboards

Technologies: ASP.NET Core, C#, SQL Server, Angular, Entity Framework, Azure AD, DevExpress

Project Name: Telemedicine application

Client Details: Apollo Hospitals, India

Project Info: Built and deployed a modular telemedicine platform in mid-2016 to support virtual patient consultations during early digital transformation in healthcare. Included EMR integration, doctor search, video calling, appointment scheduling, and secure prescription sharing.

Key Impact: Facilitated over 10,000 consultations within the first year of launch, reducing patient waiting times by 45%.

Technologies: ASP.NET MVC, ASP.NET Web API, jQuery, SQL Server, SignalR, PayPal API

Project Name: Quickbook - Venue & Ticketing Modernization

Client Details: Sathyam Groups, India

Project Info: Redesigned a legacy movie ticketing platform into a modern event booking portal tailored for organizers. Introduced responsive design, customizable booking flows, and real-time seat availability. Performed end-to-end revamp including UX audit, wireframing, development, and QA.

Key Impact: Increased user engagement by 60% and reduced event setup time for planners by 46%.

Technologies: ASP.NET Core, C#, SQL Server, Angular, jQuery, Bootstrap, Oracle