

Sakthikumar Chandrasekaran

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Permanent Resident | Graduate student from the University of Alberta

EDUCATION

University of Alberta

Edmonton, Canada

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

Pondicherry University

Chennai, India

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

Anna University

Chennai, India

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

SKILLS

• Language

- ✦ C#
- ✦ Java
- ✦ VB.net
- ✦ VB 6.0
- ✦ JavaScript

• Framework

- ✦ .NET Core
- ✦ ASP.NET Web API
- ✦ .NET Framework
- ✦ ASP.NET

• Web Technology

- ✦ ASP.NET MVC
- ✦ HTML5
- ✦ CSS
- ✦ Bootstrap
- ✦ React

EMPLOYMENT

Manufacturing Engineer

TAQA Drilling Solutions

Nov 2022 to till date | Edmonton, Canada

- Coordinated between the Engineering and Manufacturing departments and improved DFM (Design for Manufacturing) to continuously improve machining, processes, and quality, to ultimately drive cost reduction
- Reviewed Engineering Drawings to either verify manufacturability or determine potential features, process, or tolerance modifications to ease manufacturability while maintaining part fit and function
- Helped manage prototype and sustaining inventory including NCRs (Non-Conformance Reports) and ECNs
- Investigated NCR root cause issues to determine the process and part quality improvements
- Assisted in transitioning development projects to scale for production manufacturing
- Developed and implemented rework strategies for production tools that can either be completed at the districts, external vendors, or Cougar manufacturing to reduce tool operating costs per hour
- Optimized and implemented processes related to health and safety, machining/manufacturing, inventory, documentation management, NCRs, ECNs, and Quality Control

Assistant Production Manager

Durabuilt Windows and Doors

May 2022 to Oct 2022 | Edmonton, Canada

- Assisted the production manager with administrative tasks like production schedules and timesheets
- Prepared cost estimates for materials, equipment, and hiring workers for production
- Collaborated with team leaders and supervised, coached, and mentored production employees
- Managed tasks such as production schedules and timesheets, and sustained the monthly KPI as per the given target
- Evaluated employee skills and knowledge regularly to increase efficiency and reduce safety incidents
- Oversee quality control throughout the production process and maintained the production targets and deadlines
- Conducted the internal audit of ISO and 5S to confirm the Durabuilt Quality Management System (DQMS)
- Evaluated incoming materials and monitored materials used to identify concerns and keep costs low for the quality

• Database

- ✚ Microsoft SQL Server
- ✚ MySQL
- ✚ MongoDB
- ✚ PostgreSQL
- ✚ Oracle
- ✚ Microsoft Access

• Data Visualization

- ✚ Tableau
- ✚ PowerBI
- ✚ D3.js
- ✚ Sisense

• Data Processing

- ✚ Matlab
- ✚ Minitab
- ✚ R Programming

CERTIFICATIONS

- 📄 ReactJS certification from ComIT
- 📄 Oracle Certified Associate - Java SE 8 Programmer
- 📄 Microsoft Certified Azure Data Fundamentals
- 📄 Microsoft Certified PowerBI Data Analyst
- 📄 Java FullStack Developer Specialization from Coursera
- 📄 Oracle Database SQL Certified Associate

APPRECIATION

- ★ Top Performer Award in March 2016
- ★ Employee of the Month Award July 2018
- ★ Emerging Leader Award in September 2019
- ★ Red Carpet Award in March 2020

Team Lead

Congruent Info Tech

Mar 2015 - Nov 2020 | Chennai, India

- Led business analysis, design, programming, testing, implementation, and maintenance of information systems in distributed environments.
- Designed and developed custom applications using **.NET Framework 4.8, C#, WPF, Entity Framework 4.0, and SQL Server 2008 R2.**
- Developed dynamic, multi-browser-compatible pages using **HTML, CSS, React, JavaScript, and MySQL.**
- Led system studies and database engineering, creating databases, complex stored procedures, functions, views, triggers, and SQL performance tuning for better data manipulation and consistency.
- Utilized **SQL Server Reporting Services (SSRS)** and **Power BI** for creating and updating reports.
- Developed applications using the Agile methodology, participating in daily scrum meetings to discuss business processes, technology decisions, and project timelines.

Software Engineer - CAD Customization

Flowserve Corporation

Aug 2013 to Mar 2015 | Chennai, India

- Developed an application to automate the generation of 2D manufacturing drawings for mechanical seals and pumps using **C#** and **.NET API** programming.
- Created 3D assembly models in SolidWorks to check seal and pump equipment interference, utilizing **C#** for SolidWorks API integration.
- Customized **Autodesk Inventor Material Library** and templates to adhere to industry standards using **C#** for API development.
- Built applications to generate customized **Bill of Material (BOM)** and **Bill of Quantity (BOQ)** in Autodesk Inventor, ensuring compliance with industry standards through **.NET-based API programming.**
- Generated **Bill of Equipment (BOE)** in AutoCAD for models created in Autodesk ProSteel and Advance Steel, integrating XML file processing using **C#.**
- Developed several **Windows applications** to automate manual tasks for the engineering team using **C#, WPF, and .NET Framework.**
- Automated engineering calculations in Excel using **C# Excel Interop** and macros, integrating with **Visual Basic for Applications (VBA).**

Estimation Engineer

Flowserve Corporation

Mar 2011 to Aug 2013 | Chennai, India

- Automated the Spare Parts Interchangeability Record (SPIR) for mechanical seal selection, resulting in a **9% inventory cost savings per year.**
- Automated the data upload process on Miniflow using macros, reducing the team's non-value-added man-hours from **2 hrs. 40 mins/day to 1 minute**, yielding a projected annual benefit of **USD 19,828.**
- Developed a self-checking automation tool for identifying missing and overlapping dimensions in 2D drawings, saving **1200 man-hours per year** and reducing rejections by **12%.**
- Developed an **ECN emails Extractor** tool that reduced response time from **48 hrs. to 4 hrs.** when addressing ECN requests from internal customers.

SOFTWARE PROJECTS

☑ **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: Flowserve 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