



**STEPHEN DESMOND**

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**CERTIFIED  
PROFESSIONAL**  
Connect Fundamentals

## SUMMARY

Detail-oriented, laser-focused, and highly reliable IT professional with extensive experience in **healthcare interoperability**. A trusted expert in designing and deploying **scalable, secure, and efficient integration solutions** that enhance clinical and operational workflows. With over **15 years of expertise**, I bring deep technical knowledge in **Epic, Meditech, Athena, and other EHR/EMR platforms**, combined with a strong background in **AWS Cloud solutions, AI integration, and digital automation**.

I started my career as a **Technical Analyst**, specializing in **System Analysis and Channel Configuration** with **Nextgen Connect (Mirth)**. Over the years, I transitioned into **development, project leadership, and enterprise system architecture**, working with diverse technologies. My expertise spans across **HL7 (V2, V3, FHIR), API integrations, cloud solutions, and business process automation**.

With a keen eye for **problem-solving, leadership, and innovation**, I help organizations **streamline IT integration, optimize data exchange, and ensure compliance**. Passionate about **leveraging the latest technologies** to drive efficiency, scalability, and secure healthcare data interoperability.

## EXPERIENCE

### Lead - System Interop Engineer IV | CMG Health Interoperability

*New Brunswick, New Jersey | January 2012 - Present*

- **Healthcare Integration & System Architecture**
  - ≡ Design, develop, and implement robust healthcare integration solutions using **Mirth Connect, Intersystems Ensemble, Rhapsody, Epic Bridges, and Cloverleaf**.
  - ≡ Lead the implementation and optimization of **HL7 (V2, V3), FHIR, DICOM, and IHE profiles** to enhance interoperability.
  - ≡ Develop API integrations using **IBM API Connect, DataPower, and AWS API Gateway**.
  - ≡ Establish real-time (**TCP/IP, LLP**) and batch (**SFTP/FTP**) data connections between EHR/EMR systems and ancillary applications.
- **Project Leadership & Business Analysis**
  - ≡ Spearhead the planning, execution, and delivery of **enterprise-wide IT integration projects**, ensuring **alignment with organizational strategy**.
  - ≡ Facilitate **system migrations, data conversions, and legacy system decommissions**.
  - ≡ Conduct **stakeholder interviews, business impact assessments, and requirement gathering sessions** to drive project success.
- **AWS Cloud Integration & DevOps**
  - ≡ Deploy and manage **healthcare data repositories in AWS** using **RDS, EC2, and S3**.
  - ≡ Leverage **AWS Lambda** for **serverless computing and automation**.
  - ≡ Utilize **Terraform and Docker** for cloud-based **infrastructure deployment and management**.
  - ≡ Implement **security best practices** in **AWS environments** to ensure **HIPAA compliance**.

- **Technical Leadership & Mentorship**

- ≡ Train and mentor **junior developers** on **Mirth Connect, integration best practices, and Agile methodologies**.
- ≡ Conduct **code reviews, enforce quality standards, and optimize performance** across integration solutions.
- ≡ Collaborate with **cross-functional teams**, including **business analysts, developers, and security professionals**.

- **AI & Digital Transformation**

- ≡ Integrate **AI-driven analytics** into **data workflows** to enhance predictive insights.
- ≡ Utilize **Meta Business Suite** for **digital marketing strategies** and targeted outreach campaigns.
- ≡ Develop **automation scripts for data processing and report generation** using **Python and JavaScript**.

## **Technical Client Support Analyst | Meridian Health Network**

*Newark, New Jersey | January 2010 - March 2012*

- Developed and monitored **custom interfaces** using **Mirth Connect and Cloverleaf**.
- Created and executed **project work plans** aligned with **Statement of Work (SOW)** requirements.
- Provided **remote technical support** for clients worldwide using **advanced troubleshooting methodologies**.
- Conducted **requirement analysis, system gap assessments, and interface workflow documentation**.
- Managed **Active Directory accounts** and automated administrative tasks using **PowerShell scripting**.

## **TECHNICAL CLIENT SUPPORT ANALYST — Meridian Health Network**

*Newark, New Jersey, January 2010 - March 2012*

- ≡ Performed Requirement gathering, elicitation and documentation of the Business, and Interface requirement.
- ≡ Created and executed project work plans in accordance with project's Statement of Work (SOW).
- ≡ Used Mirth connect and Cloverleaf to build, and monitor custom interfaces like ADT, SIU, ORM, ORU, DFT.
- ≡ Used SQL to generate custom final reports and mapped to Physician emails via SMTP (Using HTML).
- ≡ Created Test Scripts (with various test cases) for ADT, MDM, ORM, ORU Interfaces, and test evidence.
- ≡ Developed JavaScript code sets to modify HL7 messages as they pass through the Mirth Connect Interface
- ≡ Manipulated HL7 data in XML transmissions to match vendor specifications using Java Script.
- ≡ Monitored ADT, SIU, ORU etc interface engine & queue feed for downstream applications to assure dataflow
- ≡ Performed Gap Analysis on vendor requirements for creating new interfaces and enhancing existing interfaces.
- ≡ Wrote detailed business functional requirements documents of the operational and/or system changes.
- ≡ Analyzed, recommended, and implemented requirements changes and improvements to service levels.
- ≡ Utilized remote desktop tools to provide remote support for clients worldwide.
- ≡ Implemented measures for preventing unauthorized access to client networks.
- ≡ Managed user accounts in Active Directory using PowerShell scripting.
- ≡ Performed system maintenance tasks, such as installing updates, patching systems, and monitoring performance.

## STRATEGIC IMPLEMENTATIONS/PROJECTS

- ≡ **Quest Diagnostics**  
Led the integration of Optum 360 application interfaces for physician practices.
- ≡ **Dignity Health**  
Managed migration from legacy systems to GE Centricity (GECB).
- ≡ **CloudRay/Catholic Health/Unisys Systems**  
Provided strategic oversight on server upgrades and data conversions.
- ≡ **Blue Cross Blue Shield of North Carolina (BCBSN)**  
Led a team of developers in ADT/ORU interface implementations.
- ≡ **Lantana Consulting Group**  
Developed FHIR-based applications and microservices using ReactJS.
- ≡ **Carson Tahoe Hospital**  
Integrated ADT feeds to Epic downstream systems via Ensemble and Mirth.
- ≡ **Trinity Health**  
Provided EHR support during migration from Nextgen to Epic.
- ≡ **Availity/Boeing**  
Maintained bi-directional interfaces for payers and Availity portals.
- ≡ **Avaneer Health**  
Deployed Mirth on Docker/Terraform for IBM FHIR API interactions.
- ≡ **Magentus Health (Australia)**  
Led Mirth development team for integration projects, overseeing AWS repository configurations, secure data exchange, and optimization of interoperability workflows. Managed end-to-end interface development, including API integrations and compliance with Australian healthcare standards.
- ≡ **Philips North America**  
Led Mirth integration efforts for radiology workflows, including the deployment and configuration of EIS Broker for seamless imaging data exchange. Spearheaded HL7 and DICOM integrations to enhance radiology data interoperability across multiple hospital systems.

## EDUCATION

### COMPLETED COURSEWORK TOWARDS BS IN BUSINESS

School of Management, DEVRY UNIVERSITY 2016.

### COMPLETED COURSEWORK TOWARDS ASSOCIATE IN COMPUTER SCIENCE

## SKILLS

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- ≡ Programming Languages: Java, JavaScript, SQL
  - ≡ Implementing Health Information Network solutions like MiHIN, QHIN, Nextgen DIRECT Messaging API.
  - ≡ Integration Platforms: Mirth Connect, Cloverleaf, Rhapsody
  - ≡ Healthcare Standards: HL7, FHIR, DICOM
  - ≡ Databases: MySQL, Oracle, SQL Server
  - ≡ Operating Systems: Windows, Linux, macOS
  - ≡ Tools: Eclipse, IntelliJ IDEA, SQL Developer
  - ≡ Protocols: TCP/IP, HTTP, FTP, XML, XSLT
  - ≡ Experience with documentation, Presentation, and requirement gathering, Analysis and Definition/Design
  - ≡ ADT/SIU/DFT/ORM/ORU/VXX/VXR/VXQ
  - ≡ TCP/IP, LLP ,Web services- SOAP, and RESTFUL, Vista, Batch -FTP/SFTP/UNC
  - ≡ IHIE profiles XDS, XDR, XDM, XCA for repository registration transactions like ITI-41,44, 8
  - ≡ Setting up VPN, HUB, and Amazon AWS stack-RDS, EC2 for MySQL, PostgreSQL, Oracle, and MariaDB
  - ≡ SQL scripts SELECT, INSERT INTO, DELETE, ALTER etc with various clause like WHERE / UNIQUE
  - ≡ HL7 V2.x, V3.0 ,FHIR, DICOM- PACS, IHE, EDI/X12
  - ≡ Sprint Planning
  - ≡ Leading Software Development Teams
  - ≡ Complex Problem-Solving
  - ≡ Customer Relationship Management
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## CERTIFICATIONS

- ≡ Mirth Connect
- ≡ PMI certification
- ≡ FHIR -Touchstone FHIR conformance
- ≡ PMP -Ongoing