

Daniel Silion

SR. MANAGER, SOFTWARE ENGINEERING

SUMMARY

ScrumMaster, PMP, CUA, MCTS, AWS and Six Sigma Green Belt Professional certified R&D, Sr Product and Development Manager, and Software Architect with extensive experience in the management, analysis, development and implementation of enterprise software solutions. Able to establish and sustain mutually beneficial cross-functional relationships with both internal and external project stakeholders.

Hands-on Cloud and On-Premise Solution Architect, Full Stack Software Engineer, Digital Transformation, Machine Learning Engineer with over 20 years of experience in architecting, designing and developing mobile, web and desktop solutions. Focused on architecting, designing and implementing highly scalable cloud-native SaaS Healthcare solutions with microservice architecture and large scale on-premise projects ranging from Financial to Laboratory management systems.

Certifications

AWS, ScrumMaster, PMP, CUA, MCTS, AWS and Six Sigma Green Belt Professional certified Software Architect, and Product and Development Manager.

Technology Summary

AWS, .Net Framework, .NET Core, ASP.NET Core, Entity Framework Core, SignalR, C#, Xamarin, React JS, Angular, TypeScript, Microservices, Docker, Serverless computing, Continuous Integration/Continuous Delivery (CI/CD), HL7 FHIR, REST API, gRPC, GraphQL, Machine Learning.

Design Patterns: Repository, Unit of Work, Domain Driven Design (DDD), Command Query Responsibility Segregation/Event Sourcing (CQRS/ES).

Product development in regulated environment, medical device industry.

Compliance standards: ISO 13485:2016, ISO13485:2003, ISO27001:2013, ISO9001:2008, ISO 9001:2015, ISO 14971:2019, ISO 15189, CLIA, CAP, GxP, ICH, HIPAA, GDPR, CFR 21 Part 11, 21 CFR Part 820, NATA, NeHTA, IEC 62304.

Contact

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McKinney, TX 75071

EXPERIENCE



Sr. Manager, Software Engineering

Capital One

May 2022 - Present (1 year 3 months)

Manage software development teams within Developer Navigator enterprise solution - standardized and automated SDLC experience that optimizes simplicity, accelerates development and drives quality.

DevNav empowers developers to design, setup, develop, test, deploy, maintain and monitor their app with minimum effort so they can maximize their time delivering their customers an awesome experience. Creates a managed pipeline for both non-prod and prod to build and deploy assets to AWS with full orchestration of CI/CD leveraging GitHub Enterprise, Standardized branching strategy, Enterprise Jenkins, JPL, Bogiefile, Gears file, Artifactory, Docker, ECS, Fargate, TD file, 7PS, Distributed tracing (New Relic), Application logging (Splunk), Alerting (PagerDuty), Asset Registry.

Skills/Tools:

AWS services: ECS, EC2, S3, RDS, VPC, Route53, ELB, IAM, CloudFront, CloudFormation,

CloudWatch, Lambda, SQS, SNS, EventBridge

CI/CD Pipeline, Jenkins, TerraForm, Git

Monitoring/Logging: New Relic, Prometheus, Pager Duty, Splunk

JAVA, Python

SOA, REST API Agile, JIRA



Manager, Mobile Applications

Abbott

May 2021 - Apr 2022 (1 year)

Manage the Digital Product Engineering organization and lead the ideation and implementation of nextgeneration capabilities, vision and roadmap for Abbott's Neuromodulation Product Apps, Infrastructure and Services, including Clinician Programmer and Patient Controller for the Neuromodulation devices for trial and permanent implant, remote programming feature, Deep Brain Stimulation (DBS) monopolar review, Spinal Cord Stimulation (SCS) multiple area BurstDR programming.

Research, development and innovation for human implantable cognitive software interfacing with the brain and spinal cord via Bluetooth and WiFi connectivity; delivery of Class III software medical device(s) with FDA and worldwide regulatory approval.

Skills/Tools: Azure Web App, Web API, Microsoft ASP.NET Signal R, Xamarin iOS SDK, C#,

NetAnalyzers, SonarQube, Appium, DOORS, JIRA, Visual Studio App Center, iOS



R&D Manager | Principal Software Architect

Abbott

Jan 2017 - May 2021 (4 years 5 months)

Technical leadership, Software development process expertise, Quality advocate, Business domain expertise, Full project life cycle expertise (Architecture, Design, Development, Testing, Deployment),

Good communicator and negotiator, Objective decision making, Organizational politics navigator,

Software/Infrastructure selection expert, Coach and mentor, Agile and eXtreme Programming expert.

Knowledge of developing products in a regulated environment, medical device industry.

Compliance standards: ISO 13485:2016, ISO13485:2003, ISO27001:2013, ISO9001:2008, ISO 9001:2015, ISO 14971:2019, ISO 15189, CLIA, CAP, GxP, ICH, HIPAA, GDPR, CFR 21 Part 11, 21 CFR Part 820, NATA, NeHTA.

Medical Device Connectivity/Systems Interfacing standards and protocols:

- HL7 FHIR, HL7, JSON, OpenAPI, SOAP, XML, CSV, Excel, custom formats

- HL7 MLLP, TCP/IP, REST API, gRPC, Web services, SFTP, SMB, ASTM, AWS S3, GraphQL



Software Engineering Manager

Abbott

May 2012 - Dec 2016 (4 years 8 months)

eyeNet

- Web based solution providing systems interoperability.

Skills: Software Architecture, ASP.NET Web API, MVC, Identity, N tier architecture, AutoFac IoC Container, Generic Repository, Unit of Work, AutoMapper, Semantic Logging Application Block, EntityFramework, Electronic Signature and Audit, Crystal Reports integration, Moq, VS Text Templating, VS Unit Testing, VS UI Testing, Extended ASP.NET data control attributes

Healthcare Informatics

- Managing the development of the Abbott Healthcare Informatics Solution - software that is built and implemented as a product (COTS), having a large audience: Clinical Research: Biorepositories, Clinical Trials; Diagnostic Laboratories; Reference Labs. Design/manage product lifecycle, design/manage the development of new functionality.

Transitioned the management of the Abbott Healthcare Informatics Solution SDLC to TFS, from previous in-house solution.

Extended Team Foundation for automations (auto create user story tasks; auto assign tasks, bugs and issues; auto close/reactivate parent work item, etc.), a C# solution that uses the Team Foundation server object model on the application tier.

Skills

Software Design, Project Management, Product Implementation Management, Product Strategy and Planning, Coordination of Core Product and Client Project implementations, Software Development Life Cycle, TFS, JScript .NET, C#, Team Foundation server object model, SSL, SQL Server Administration, T-SQL, Oracle Administration, PL/SQL



Software Engineering Manager

Abbott

Mar 2010 - Apr 2012 (2 years 2 months)

Managed the development of the SUNRISE product - software that is built and implemented as a product (COTS), having a large audience: Public Health Laboratories, Centers of Disease Control. Designed/managed product lifecycle, designed/managed the development of new functionality.

+ Software Engineering Manager

SUNRISE product (LIMS for the PHL sector), web-based laboratory information management system development in JScript .NET and SQL Server/Oracle RDBMS

Transitioned the SDLC from waterfall to Agile

+ Project Manager

Vermont Department of Health, StarLIMS V10, SQL Server 2005

CDC - NCEH (National Center for Environmental Health) Support

CDC - CCID (Coordinating Center for Infectious Diseases) Support



Software Product Manager / Project Manager

Abbott

Dec 2003 - Mar 2010 (6 years 4 months)

Starlims: Managed the SUNRISE product - software that is built and implemented as a product (COTS), having a large audience: Public Health Laboratories, Centers of Disease Control. Designed/managed product lifecycle, designed/managed product new functionality.
Managed customer projects.

+ Software Product Manager

SUNRISE product (LIMS for the PHL sector), web-based laboratory information management system development in JScript .NET and SQL Server/Oracle RDBMS

+ Project Manager / Lead Engineer

Vermont Department of Health, StarLIMS V10, SQL Server 2005

CDC - NCEH (National Center for Environmental Health) Support

CDC - CCID (Coordinating Center for Infectious Diseases) Support

+ Project Lead Engineer

Cott Beverages, StarLIMS V10, SQL Server

Iowa UHL, StarLIMS V9, Oracle 10g

Tennessee PHL, StarLIMS V9, SQL Server

+ Senior Engineer

M&G, StarLIMS V10, SQL Server

+ System Analyst / Software Engineer

Maine Department of Health and Human Services, StarLIMS V9, Oracle

California Department of Health Services, StarLIMS V9, SQL Server

Demo for Saskatchewan, StarLIMS V10, SQL Server

Burns & Roe Services Corp., StarLIMS V9, Oracle

EMD, StarLIMS V9, Sybase

Demo for Ben&Jerry's, SQL Server

ESRD, StarLIMS V9, Oracle

Internal project management system - OIMS, StarLIMS V9, SQL Server

NCID, StarLIMS V9, SQL Server

Skills

Software Design, Project Management, Product Implementation Management, Product Strategy and Planning, Coordination of Core Product and Client Project implementations, Software Development Life Cycle, JScript .NET, SSL, SQL Server Administration, T-SQL, Oracle Administration, PL/SQL



Software Engineer

Elsaco

Jun 2002 - Dec 2003 (1 year 7 months)

Developed multiple Web applications in php and desktop application in Visual Basic with various RDBMS support.

+ Coordinated and participated in the creation of a billing application for ApaTerm Oradea and R.A.M. Buzau, water distribution companies, application implemented in php with Sql Server database support

+ Developed an application for analysis, tracking and diagnosis of a meter park, application implemented in Visual Basic with Microsoft Access database support

+ Developed Several Web applications, implemented in php with MySQL database support: Web application for Internet traffic monitoring, Web application for automatic exchange traffic monitoring

Skills

PHP, Visual Basic, SQL Server Administration, T-SQL, MySQL Administration and Development, Microsoft Access



Software Engineer

InfoTip

Apr 2001 - Jun 2002 (1 year 3 months)

Developed multiple Delphi applications with various RDBMS support.

- + Participated in the creation of a tax application for Botosani Mayoralty, application implemented in Delphi with Oracle database support
- + Developed an application for administration of a veterinary surgery, application implemented in Delphi with Paradox database support

Skills

Borland Delphi, Oracle Administration, PL/SQL, Paradox Administration and Development



Software Engineer

Electrocontact

Jan 2001 - Mar 2001 (3 months) Developed Visual C++ application.

- + Developed a presentation catalogue which was presented at Hanover Fair, application implemented in Visual C++

Skills

Visual C++



Software Engineer / Network Administrator

Transilvania Consult

Aug 2000 - Dec 2000 (5 months)

Network administration and Web site development and maintenance.

- + Built and maintained Transilvania Consult's Web page
- + Linux and Windows Network Administration

Skills

CGI C++, MySQL Administration and Development, Network Administration, Suse Administration, Windows Administration

LICENSES & CERTIFICATIONS



AWS Certified Solutions Architect – Associate

Amazon Web Services (AWS)

Issued Aug 2022 - Expires Aug 2025

8P4XJREKQFBE1PG6



CUA (Certified Usability Analyst)

HFI (Human Factors International)

2013-4475



PMP

PMI

Issued May 2010 - Expires May 2016 1336843



MCTS

Microsoft

7717663



Certified ScrumMaster

Scrum Alliance

000200861



Six Sigma Green Belt Professional

6sigmastudy.com

103245



CAPA Initiator/Evaluator

Abbott



CAPA Investigator

Abbott



Microsoft Specialist: Programming in C#

Microsoft

F301-9134

EDUCATION



Universitatea „Alexandru Ioan Cuza” din Iași

Bachelor's degree, Computer Science

1996 – 2000



Carnegie Mellon University

Software Architecture

2014 - 2014

Carnegie Mellon University Software Engineering Institute (SEI) Software Architecture courses:
Principles and Practices, Design and Analysis



Human Factors International

Certified Usability Analyst (CUA) training courses

2012 - 2013

CUA Track Courses attended:

- User-Centered Analysis and Conceptual Design
- The Science and Art of Effective Web and Application Design
- Practical Usability Testing
- Putting Research into Practice
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AWS Training and Certification

Architecting on AWS, Computer Science

Jun 2022 - Jun 2022

Architecting on AWS

Instructor led

Architecting on AWS is for solutions architects, solution-design engineers, and developers seeking an understanding of AWS architecting. In this course, you will learn to identify services and features to build resilient, secure and highly available IT solutions on the AWS Cloud.

Architectural solutions differ depending on industry, types of applications, and business size. AWS Authorized Instructors emphasize best practices using the AWS Well-Architected Framework, and guide you through the process of designing optimal IT solutions, based on real-life scenarios. The modules focus on account security, networking, compute, storage, databases, monitoring, automation, containers, serverless architecture, edge services, and backup and recovery. At the end of the course, you will practice building a solution and apply what you have learned with confidence.

<https://www.aws.training/Details/InstructorLedTraining?id=100298>



Udemy Alumni

Machine Learning A-Z™: AI, Python & R + ChatGPT, Machine Learning

May 2023 - Present

Machine Learning/Data Science Algorithms in Python and R:

- Data Preprocessing
- Regression: Simple Linear Regression, Multiple Linear Regression, Polynomial Regression, SVR, Decision Tree Regression, Random Forest Regression

- Classification: Logistic Regression, K-NN, SVM, Kernel SVM, Naive Bayes, Decision Tree

Classification, Random Forest Classification

- Clustering: K-Means, Hierarchical Clustering
- Association Rule Learning: Apriori, Eclat
- Reinforcement Learning: Upper Confidence Bound, Thompson Sampling
- Natural Language Processing: Bag-of-words model and algorithms for NLP

- Deep Learning: Artificial Neural Networks, Convolutional Neural Networks
- Dimensionality Reduction: PCA, LDA, Kernel PCA
- Model Selection & Boosting: k-fold Cross Validation, Parameter Tuning, Grid Search, XGBoost



Udemy Alumni

Ultimate AWS Certified Solutions Architect Associate 2022, Computer Science

Jun 2022 - Aug 2022

AWS Certified Solutions Architect Associate course - Udemy:

The AWS Fundamentals: IAM, EC2, Load Balancing, Auto Scaling, EBS, EFS, Route 53, RDS, ElastiCache, S3, CloudFront

The AWS CLI: CLI setup, usage on EC2, best practices, SDK, advanced usage

In-Depth Database comparison: RDS, Aurora, DynamoDB, Neptune, ElastiCache, Redshift, ElasticSearch, Athena

Monitoring, Troubleshooting & Audit: AWS CloudWatch, CloudTrail

AWS Integration & Messaging: SQS, SNS, Kinesis

AWS Serverless: AWS Lambda, DynamoDB, API Gateway, Cognito

AWS Security best practices: KMS, SSM Parameter Store, IAM Policies

VPC & Networking in depth

AWS Other Services Overview: CICD (CodeCommit, CodeBuild, CodePipeline, CodeDeploy),

CloudFormation, ECS, Step Functions, SWF, EMR, Glue, OpsWorks, ElasticTranscoder, AWS Organizations, Workspaces, AppSync, Single Sign On (SSO)



Microsoft

ASP.NET Core MVC, Computer Software Engineering

2020 - 2020

Develop advanced ASP.NET Core MVC applications using .NET Core tools and technologies.



Microsoft

C#, Computer Programming

2015 - 2015

Microsoft Virtual Academy Exam 70-483 - Programming in C# training



PluralSight

Modern Software Architecture: Domain Models, CQRS, and Event Sourcing

2015 – 2015



Pluralsight

Picturing Architecture: UML (The Good Bits) and More, UML

2016 - 2016

This course shows you how to visualize and communicate architecture using pictures, which is essential in an Agile environment. It takes you through the design process, covering everything from story cards to representing complex activity flows.



Microsoft

Identity, ASP.NET

2015 - 2015

Microsoft Virtual Academy Customizing ASP.NET Authentication with Identity



PluralSight

LINQ, Practical LINQ

2015 – 2015

**Udacity**

Software Development Life Cycles, Computer Software Engineering

2014 - 2015

Life Cycle Models, Integrated Development Environment, Version Control Systems, Requirements Engineering, OO Software and UML, Software Architecture, Analysis and Design, Design Patterns, Unified Software Process, General Concepts, Black-Box Testing, White-Box Testing, Agile Development Methods, Software Refactoring

**PluralSight**

Design Patterns

2014 - 2015

PluralSight's design patterns library contains descriptions and C# examples of software design patterns that you can apply in your daily development. These patterns are time proven techniques for building long-lived, well factored software that are widely used in software development today.

**ScrumAlliance**

CSM, Project Management

2012 - 2012

Scrum Master Certification Prep course

**ERC Communications**

Executive Presentation Skills

2012 - 2012

**Microsoft**

Visual Studio 2010 ALM

2012 - 2012

Team Foundation Server Essentials - Certificate of Completion: <http://goo.gl/xYF4D> Testing Tools - Certificate of Completion: <http://goo.gl/qjfr>

**ai-class**

Artificial Intelligence

2011 - 2011

Completed advanced track of online class "Introduction to Artificial Intelligence" (www.ai-class.com) taught by Peter Norvig (director of Research at Google, author of AIAMA) and Sebastian Thrun (Professor at Stanford University, Google Fellow).

Statement of Accomplishment: <http://goo.gl/StizK>

**Abbott Learning and Development**

Management

2010 - 2011

Leadership Training

Crisis Management

Manager Basics

Art of Effective Feedback

Know the Business

Performance Excellence

Interviewing and Talent Acquisition Open Communication



Global Knowledge

Microsoft Certified Technology Specialist: Managing Projects with Microsoft Office Project 2007, Project Management
2010 - 2010
Managing Projects with Microsoft Office Project 2007 Boot Camp



VMedu Faculty

PMP, Project Management
2010 - 2010
Project Management Professional(PMP)® Certification Exam preparation



VMedu Faculty

Six Sigma Green Belt Professional, Six Sigma
2010 - 2010
Six Sigma Green Belt Course



PluralSight

F# Jumpstart
2016 - 2016
F# is a .NET (CLI) language. It combines functional and OO (Object Oriented) concepts to you let you solve complex problems with simple code.



Pluralsight

Introduction to UML, UML
2016 - 2016
This course introduces the Unified Modeling Language (UML) and several of the diagrams that are most often used in software development.



Pluralsight

Software Engineering Essentials, Computer Software Engineering
2016 - 2016
The IEEE defines Software Engineering as "the application of a systematic, disciplined, and quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software." Software engineering is a discipline applied throughout the entire software lifecycle, spanning the early phases of system specifications all the way to maintenance after system deployment. So why use an engineering approach to software? Quite simply, because the alternative would be to use an ad-hoc or disordered approach. An engineering approach means predictability and quantifiable results through the application of theories, methodologies, frameworks, and tools. When applied efficiently, the result is high-quality software created in a cost-effective manner.



FigLeaf

Sencha ExtJS 6.2
2016 - 2016
Back to coding UI with Sencha ExtJS JavaScript framework with a vengeance after completing the bootcamp.
<https://training.figleaf.com/courses/ExtJS6Class.cfm>



PluralSight

Angular
2017 - 2017



TypeScript
2017 – 2017



Machine Learning with Python, Machine Learning
2017 - 2017

Use your data to predict future events with the help of machine learning. This course will walk you through creating a machine learning prediction solution and will introduce Python, the scikit-learn library, and the Jupyter Notebook environment.



Visual Studio ALM, ALM
2017 – 2017



UX Design Essentials Workshop, UX
2018 - 2018

Practical essentials:

- Using an efficient, user-centered design process
- Making a design intuitive, simple, and delightful
- Designing tasks, task flows, and pages
- Evaluating designs, giving and receiving effective feedback
- Performing informal usability studies



Building Web Applications with ASP.NET Core MVC
2020 - 2020

Build a complete application with ASP.NET Core 3.0 MVC using Visual Studio 2019.



Computer Software Engineering
2020 - 2020

AWA 102 - Secure Software Concepts

DES 212 - Architecture Risk Analysis and Remediation

ENG 211 - How to Create Application Security Design Requirements

DES 311 - Creating Secure Application Architecture



Microsoft Azure Architect, Computer Software Engineering
2020 - Present

- Implement and Monitor Azure Infrastructure: Implementing Cloud Infrastructure Monitoring, Creating and Configuring Storage Accounts, Implementing and Managing Virtual Machines, Implementing and Managing Virtual Networking, Creating Connectivity between Virtual Networks, Managing Azure Active Directory (Azure AD), Implementing Multi-Factor Authentication (MFA), Implementing and Managing Hybrid Identities
- Implement Management and Security Solutions: Managing Workloads in Azure, Implementing Load Balancing and Networking Security, Implementing Azure Governance Solutions
- Implement Solutions for Apps: Creating Web Apps Using PaaS and Serverless, Designing and Developing Apps for Containers, Implementing Authentication
- Implement and Manage Data Platforms: Developing Solutions that Use Cosmos DB Storage

Developing Solutions that Use a Relational Database



LinkedIn Learning

Microsoft Azure, Computer Science
2021 – Present



Capital One - Tech College

Certified Secure Software Engineer - Associate, Cyber
Jul 2022 - Jul 2022

Designing and deploying secure and robust applications are the foundation of programming.

SKILLS

Strategy • Amazon Web Services (AWS) • Team Leadership • SDLC • Agile Methodologies • Scrum
• SQL • Software Development • Microsoft SQL Server • Databases