

# Shawn McCarthy

2022

Senior IT Executive



shawn@mccarthysoftware.com

<https://www.linkedin.com/in/shawnemccarthy>

Gallup: Strategic, Achiever, Learner, Activator, Relator, Maximizer

## SUMMARY

Mr. McCarthy is an experienced Senior-level IT executive with over 24 years experience whose passion is to **inspire growth**. His background includes **leadership, organizational evolution, M&A, agile and devops change agent**, recruiting interns and professionals, **developing/coaching teams and individuals**, system architecture, system development and design, application programming, product support, business analysis, and professional training. He has performed exceptionally in every environment he has ever worked in, as can be measured by his numerous recommendations and letters of recognition. Mr. McCarthy's **ability to learn** new technologies, adapt to any situation, and **develop new leadership skills** coupled with an **energy and passion** that is infectious has made him a valuable resource in any technical environment.

## EDUCATION

### University of Colorado (Current)

PhD Candidate, Computer Science and Engineering (GPA 4.0)

- Mixed Method Research
- Big Data Science
- Anomaly detection leveraging deep learning for time-series data

### University of Colorado (2009)

M.S., Computer Science and Engineering (GPA 4.0)

- Intelligent Agents
- Neural Networks
- Linguistic Geometry
- Expert Systems
- Artificial Intelligence
- User Experience Design
- **Graduated Top of Class**

## University of Colorado (2003)

B.S., Computer Science and Engineering (GPA 3.99)

Minor in Mathematics

- Engineering Deans List (Spring 1999 – 2003)
- **Graduated Top of Class**

## EXPERIENCE

### **Vice President, Global Architecture, Risk and Investment Big Data Platforms**

#### **Manulife**

03 / 2020 – Present

As Vice President, Mr. McCarthy leads a centralized architecture for the Global Wealth and Asset Management including Platform, Solution, Data, and Enterprise Architecture for a portfolio of over 755 applications. This include developing the architecture frameworks and maturing the architecture practice across the firm. In addition, leading the Big Data engineering teams focused on ingestion, curation and access layer for the investment data data lake including over 100 sources of data across retirement and retail wealth applications. Current maturity level is through the development and maturing of application roadmaps 2-3 years across each of the verticals within GWAM (General Account, Retail and Retirements across North America and Asia). Furthermore, leading and transforming the Line 1B Risk organization to adapt agile methodologies and shift risk left into the development lifecycle across Information Risk Assessment, Cyber security, Risk strategy, Application security, and Business Continuity management.

### **Managing Director, Solution and Platform Architecture**

#### **Charles Schwab**

09 / 2016 – 03 / 2020

As a Managing Director, Mr. McCarthy leads a centralized solution architecture team focused on the **digital experience** (Schwab.com, Mobile, Trading, Digital Messaging, CI/CD and Wealth Management Technologies) specifically focused on technical roadmaps, macro architecture, 4+1 architectural view models, executive briefing, community of practice and Tech Debt management. Furthermore, Mr. McCarthy over the last several months has been focused on the 3-5 **technology strategies** across client experience technology, wealth management technology and corporate IT (technology long-term planning in the 3-5 year period) including **application**

**modernization**, identifying opportunities in each organization and aligning technology to address those business capabilities.

- **Technology Strategy (Blueprint)**

- Assessments – Qualitative, Quantitative and Comparative
- Blueprint – Target view, representing 3-5 years in the future, providing technical strategy
  - Area Deep Dives
    - Context – including areas of investment, channels, personas, business functions supported, data providers/consumers
    - Macro – Application grouped by external engagement, internal engagement and system of record
    - Subway timelines – 3 year delivery projection
    - SDLC – How we work, current state and anticipated
    - Organization
  - Develop target state
  - Develop Core vs Context
  - Executive Summary

- **Platform Technology Strategy**

- **Platform Architecture** responsibility for Schwab Application technology – 1200+ applications
  - Mobile – **mobile first** consistency across multiple domain (retail, retirement, advisor, employee)
  - Web APIs – **digital first** strategy across firm
  - Cloud – IaaS, PaaS, SaaS, CaaS

- **N.E.R.D.** - Developed New Employee Recruitment and Development program

- Imagine for a moment where we over invest in organizational design, talent and leadership development and create a program that can unlock our potential, provide tours of duty through engineering tracks in an accelerated professional development program to empower the next generation of engineers with the cross-functional skills and future technologies that drives the organization forward.

## Head of Portals and APIs

Vantiv

(Multiple Roles) 11/ 2011 – 09 / 2016

As a Director/VP for a large financial institution, Mr. McCarthy leads a large development organization responsible for the design and architecture of solutions for **API Solutions** that included modern API Management technologies and current Developer Ecosystem architecture patterns in order to facilitate performance, maintainability and user experience improvements. The focus of the team is centered on **API as a Product, secure code development, Developer Experience (DX)**, and performance updates to a transaction based processing platform.

- API Solutions
- SOA Patterns
- ESB
- Development of IT Intern Program
- Change Agent
- Agile Coach
- Leadership

## Lecturer

University of Colorado Denver

01 / 2015 - Present

Teaching special topic course in **Web API Technologies**

- Web Services, History of APIs
- HTTP - JavaScript/jQuery/JSON - Node.js
- API Design / Swagger / Best Practices
- API Management
- BaaS / Apigee127 / Volos
- Policies
- Developer Portal / Interactive Documentation
- Mobile
- Social Coding
- Single Page Apps
- IoT, Hypermedia

## Advisory Board Member

University of Colorado Denver

05 / 2014 - Present

Serving on the CSE UCD Advisory Board, we are focused on:

- Driving corporate **relationships** to support the college
- Expanding the presence of the UCD within the community

- **Developing programs** and opportunities for the students
- Encouraging **faculty development**

**Technical Advisory Board Member**

**Apigee (APIC)**

05 / 2014 – 09/2016

Serving the **Apigee Technical Advisory Board**, we are focused on:

- **Driving technical relationships** to support the API management strategies
- Developing product and **technical roadmaps**
- Improving the **technical foundation**
- Encouraging technical mentorship
- **Evangelizing** API development and ecosystems

**Enterprise Architect**

**First Data Corporation**

(Multiple Roles) 6 / 2002 - 11 / 2011

As a Business Systems Architect for a large financial institution, Mr. McCarthy designed and architected solutions for an Enterprise Federal Tax Payment System (EFTPS) that included Web 2.0 technologies in order to facilitate user experience improvements. The focus of 2011 centered on secure code development, UX, and performance updates to a transaction based payment platform.

- Leader of the Pack
- Lead Architect on AuthentiCare (Healthcare)
- Architect on PayPoint (Payment Gateway)

**SKILLS**

- Strategy, Vision and Inspiration
- Leading, Encouraging and Coaching Teams
- Finance and Resource Management
- Building Relationships
- Software Development and Evangelism
- SOA, Web Services, Web Application, APIs
- SDLC, Agile Methodologies, Scrum and SAFe
- Databases and Enterprise Applications
- Cloud Computing
- Disaster Recovery
- Secure Coding

## CERTIFICATIONS

### **Instructor Certifications (NLP, Recommender Systems, Anomaly Detection)**

Nvidia

June 2022

### **Machine Learning with TensorFlow on GCP Specialization**

Coursera

Feb 2019

### **Java Certified Programmer**

Sun

### **Microsoft Certified Professional ASP.Net C#**

Microsoft

### **Certified ScrumMaster**

07 / 2012 - 07 / 2014

ScrumAlliance

### **Certified SAFe Agilist**

10 / 2014

Scaled Agile, Inc. · License: 29608438-1308

## PATENTS

### **Systems and Methods for Transaction-Based Process Management**

Filed , 10 / 2014

US Patent: 14/527,017 · Inventors: Shawn McCarthy, Jack Unrau, Matt Cook

## ORGANIZATIONS

**ACM/WICS**

**SIGART**

**AnitaB**

## RECOMMENDATIONS

"Shawn's tireless energy never ceases to amaze me. When you're around Shawn, you want to do better. His passion truly is contagious. He's a change agent, and he not only initiated positive change for his team, but for the company as a whole. One team in particular that he lead was regarded as one of the most agile, efficient, and well-tuned product development teams in the entire company. Shawn's success and passion were so apparent, that he is now leading a cultural transformation throughout the entire technology organization. A huge challenge, but Shawn's the guy to get it where it needs to go. I hope to

continue to work with Shawn, even if it's just sharing ideas, discussing similar challenges, etc. Any technology or product development team would be lucky to have him. "

— Shane Foster, Senior Manager, Cloud Solutions, Vantiv, worked directly with Shawn at Vantiv

"Shawn worked for me as a Senior Systems Architect for 2004 - 2008. Shawn is one of the best development resources I have had the pleasure of working with. As a developer, he is at the top of the game with the unique ability to design and develop elegant solutions to complex problems. He is able to think through the interdependencies of changes and the potential cascading affects associated with his work ensuring his solutions result in a high degree of interoperability and quality. Shawn's passion for technology combined with his excellent communications skills make him a favorite among his peers. He is always willing to spend time mentoring less accomplished team members or educating peers on new techniques or technology that help lift the team up. Whether he is leading a team lead or collaborating within a team on a project Shawn is always enthusiastic and looking to take on the toughest challenges. Over time, this has resulted in a well-rounded mixture of experiences that are applied to his work in a variety of ways. He brings multiple talents to a team from including, architecting, excellent coding skills, interface design, copywriting, IT systems architecture and much more. Shawn is someone you can trust to get things done well. His approach and technique ensure whatever he creates has a high degree of long-term sustainability. Shawn is all around good guy who establishes trust and respect of leadership and peers through his actions."

— Jeff Siekman, managed Shawn at First Data Corporation