James Madison
Data Science Architect

Profile

Innovative problem solver whose top personal competencies are:

- *Initiative*. Taking on challenges where even the objective may be undefined.
- *Learning*. Continually acquiring any new skill needed to get the job done.
- *Integration*. Resolving conflicting demands into solutions acceptable to all parties.
- *Delivery*. Turning complexity into a constant stream of customer-visible functionality.
- *Scale*. Creating processes and systems that are repeatable and maintainable over time.

Hartford Financial Services, 2001 - Present

Enterprise innovation data scientist (2013). Enterprise information architect (2010).
P&C segment architect (2006). P&C data warehouse (2003). Consumer actuarial (2001).

- Won chairman's award for a solution 90% cheaper, 5x faster, and 3x more functional.
- Delivered 20 solutions as the lead technologist of an enterprise innovation team.
- Led a 7-person team to build a 200 table dimensional warehouse in a $25M program.
- Built an in-stream data quality process that dashboarded 3,000 metrics in real time.
- Rationalized 25 document sites to a single knowledge management portal in 9 months.
- Championed adoption of Agile/Scrum, training 300 people and guiding 15 projects.
- Created enterprise data and technology standards processes used by over 1,000 staff.
- Led a 2-year, $450,000 CMM continuous improvement project, finishing in 1.5 years.
- Built a clustered C++ enterprise ratemaking system where 3 prior attempts failed.
- Managed up to 11 people from 2001-2005, then got out of management for good.

Prior Experience, Through 2001

Actuarial. Call center. Logistics. Warehousing. Manufacturing. U.S. Marine Corps.

- Improvised a massive system recovery at 1 a.m. to deliver a 2.5 year project for 8 a.m.
- Built a multi-process, multi-threaded, telephony system on 3-tier TCP/IP network.
- Embedded C++ in Visual Basic in a way Microsoft Consulting said was impossible.
- Created an X Windows system in C to monitor 200 devices on the factory floor.
- Earned the highest metal in my 170-person unit during a national defense operation.

Education and Achievements

- Published by IEEE and CAS.
- Hold 2 patents, 2 pending.
- Passed 8 certification exams.

- M.S. Computer Science, 4.0 GPA.
- B.S. Computer Science, 3.9 GPA, 4th of 1,400.
- Full list: http://www.qa76.net/portfolio.

Top Skills

Analytics
- Collaborative filtering
- Data science
- Geospatial/ESRI
- H2O/MLlib/Spark
- Machine learning
- Model evaluation
- Optimization/GAMS
- Predictive analytics
- Python
- R/RStudio/Shiny
- Ratemaking
- SAS
- Text/NLP/OCR/Watson
- Visualization/ggplot

Architecture
- CMM/CMMi
- Data quality
- Data virtualization
- Data warehousing
- Dimensional modeling
- Governance/metadata
- KM/SharePoint
- MDM/IAA/IIW/ACORD
- Relational modeling
- Taxonomy/ontology

Data/BI
- Business Objects
- ERwin/modeling
- Hadoop stack
- Informatica/ETL
- IoT/machine data
- Oracle DB/Exadata
- SQL Server/MSBI
- Teradata
- XML/JSON

Application
- Agile/Scrum
- C/C++/VC++
- HTML/CSS/JS/PHP
- Java/JSP/Tomcat
- Linux/UNIX
- SOA/REST/SOAP/WSDL