**Professional Summary**

* **Project Management** - managed personnel, scope, schedule, budget, risk, and quality of test product for Department of Defense (DOD) and National Aeronautics and Space Administration (NASA) software/hardware Test and Evaluation programs (2010-2016).
* **Systems Engineering** - performed architectural development (UML, DODAF), requirements development, integration and test, trade studies, product training, and system operations and maintenance (1994-2010).
* **Data Science** - developed the Colorado Counties Marijuana Dataset to track sales and tax revenue at a county level. The dataset is part of an ongoing effort to build a longitudinal dataset to identify county success factors and develop a predictive algorithm that can “score” potential county success following adoption of legal marijuana sales - <https://github.com/davelovesdata/CO-Marijuana-Dataset>

**Most Recent Experience**

**Regis University Student (Jan 2017 – December 2018)**

* Completed the Regis University **Master of Science in Data Science (MSDS)** degree program. Coursework included: Statistical Methods & Experimental Design, Data Collection & Preparation, Data/Text Analytics, Data Visualization, and Machine Learning. Graduate projects include:
  + A geocoding project to map Denver county marijuana locations against Denver county crime. This project was done in the R programming language - <https://github.com/davelovesdata/Regis-I---Denver-Marijuana-Locations>
  + An analysis of Colorado Marijuana sales at the county level. Project was done in R (data wrangling, data visualizations), Python (twitter sentiment analysis), and Tableau (map visualizations) - <https://github.com/davelovesdata/Regis-II---Colorado-Marijuana-Project>

**Raytheon (2001-2016)**

**GPS-OCX Segment/Element Test Manager (Aug 2012 – July 2016)**

* Managed the test engineering lifecycle for a large national satellite command and control program.
  + Technical and line leadership of thirty-four engineers in the planning, development, execution, and reporting of test activities.
  + Implemented organizational policies; developed and maintained schedules; cost estimates of change requests; earned value analysis; risk management; captured lessons learned and identified process improvements.
  + Negotiated internal/external giver-receiver requirements including use of Government Furnished Equipment (GFE) and partner contractor resources.
  + Represented Raytheon to the Air Force Customer in technical interchange meetings, entry/exit criteria review meetings, test artifact peer reviews, and program schedule/cost reviews.

**JPSS C3S IPT Test Manager (Mar 2010 – Aug 2012)**

* Performed similar activities as described above but on a smaller scale ($7.6M and 17 engineers).

**Employment History**

Raytheon IIS, Aurora CO, 03/2001 - 07/2016

Lockheed Martin Technical Operations, Denver CO, 10/1997 - 03/2001

Allied Signal Technical Services, Blossom Point MD, 03/1994 - 10/1997

**Formal Education**

M.S in Data Science, Regis University, GPA 4.0

B.S in Computer Information Systems, Strayer University, GPA 3.85

**Continuing Education**

Data Science Specialization Certificate (in progress - R programming based) - Coursera

Data Science Bootcamp (in progress - Python programming based) - Udemy

**Relevant Data Science Tools & Skills**

R/RStudio, Python (novice), Tableau, MS Excel, Jupyter Notebooks, Jupyter Lab, Structured/Unstructured data, Sentiment Analysis, Machine Learning/Predictive Analytics, Visualization, Data Engineering

**Other Systems Engineering Experience (prior to 2010)**

**Operations and Maintenance**

* Developed ground station processes including mission planning, Day-In-The-Life (DITL) operations, and spacecraft and ground anomaly detection and response.
* Authored training material of spacecraft subsystem software including data management, timing distribution, ephemeris determination, and telemetry and command subsystems.
* Performed spacecraft and ground segment command and control operations.

**Systems Analysis and Design**

* Developed Use Case diagrams including overview diagrams, class diagrams, activity diagrams, sequence diagrams, state machine diagrams, and deployment diagrams.
* Developed DoDAF v1.5 artifacts to describe system architecture.

**Systems Engineering**

* Developed requirements for multiple satellite system programs.
* Developed analysis and inspection plans and reports.
* Participated in multiple trade studies.

**Systems Integration**

* Coordinated the integration of two satellite system command and control operations into operational U.S. government facilities.
* Performed formal site surveys and installation checkouts.
* Developed and maintained installation documentation, including Build of Materials (BOM), network topology, and site interface specifications.

**Test Engineering**

* Developed test cases and procedures for Hewlett-Packard Open View (HPOV) and Raytheon proprietary Ground Equipment Status and Control (ESC) software. Purpose of test effort was to verify and validate situational awareness capabilities for a globally distributed network.