

# COSTIN RADULESCU

NASA MULTI-MISSION GROUND SYSTEM AND SERVICES (MGSS)  
PROGRAM CHIEF ENGINEER

+1(818)442-3194 | [costin.radulescu@jpl.nasa.gov](mailto:costin.radulescu@jpl.nasa.gov) | April 2023

## Skills Summary

Chief Engineer of NASA/JPL's Interplanetary Network Directorate's (IND) Multi-mission Ground System and Services Program (MGSS) with a strong technical background and proven excellence in leadership, software development practices and techniques, and innovative technology infusion within NASA, industry and academia.

Proven track record within the Multi-mission Ground Systems and Services Program, Planetary Data System (PDS), Deep Space Network (DSN) and flight projects.

Highly respected professionally and personally by the MGSS Program Office and IND, MGSS Program Executive at NASA Headquarters (HQ), JPL's Office of the Chief Engineer and Division leaders at JPL, NASA centers (e.g., GSFC, JSC, GSC, APL), international partners (e.g., ESA/ESOC, CNES, JAXA), and international Standards bodies (e.g., CCSDS, IOAG).

## Education

### ***Master of Science in Computer Science***

University of Southern California (USC), Los Angeles, California

### ***Bachelor of Science in Computer Science***

California State Polytechnic University (Cal Poly), Pomona, California

## Experience

### ***Jet Propulsion Laboratory / 1997 - Present***

*Multi-mission Ground Systems and Services Program (MGSS)*

Program Chief Engineer, Manager of System Engineering Office

- Technical authority of the MGSS Program overseeing tactical and strategic Program activities impacting JPL, NASA, the industry, academia and our international partners, standard bodies and the Planetary Data System.

- Member of IND's System Engineering Leadership team maintaining direct interfaces with the different offices within IND and JPL's Office of the Chief Engineer.
- JPL's representative in Space Communications and Navigation's (SCaN) Surrogate Mission Team working with NASA Centers such as GSC, JSC, GSFC and HQ to provides direction to NASA Program System Engineering on future mission operational scenarios and technologies.
- CCSDS member and contributor in the System Engineering (SEA) and Mission Operations and Information Management (MOIMS) areas.
- Chair of the Interagency Operations Advisory Group's Mission Operations Systems Strategy Group (MOSSG).
- NASA representative and lead of the mission operations interoperability demonstration activities among NASA, ESA and CNES which validate future standards for mission operations and interoperability.
- Advisory Board Member of the American flagship Ground Software Architectures Workshop (GSAW).
- Technical interface and communications for the MGSS Program to NASA HQ Program Executives (PE)

## Previously at JPL

*Multi-mission Ground Systems and Services Program (MGSS)*

Manager, Instrument Data Systems Element (IDS).

- Product Delivery Manager of the Multi-mission Instrument Data Systems Element
- Designed and developed the first MGSS-PDS crosscutting science product automated archiving function (the AMMOS-PDS Pipeline Service). Product first used on InSight followed later by Mars2020.

## **DIGITEXX Data Systems Inc / 2001- 2003**

*Co-founder and Manager of the Software Systems Development Division*

- Managed product development, "cradle-to-grave", of company's flagship 24/7 real-time communication and high-throughput data system, serving emerging new IoT paradigm of structural health monitoring for high-risk and life-line structures.
- Patent holder <http://www.google.com/patents/US8538734> **Extreme event performance evaluation using real-time hysteresis monitoring**

## **Awards and Acknowledgements**

### ***Voyager Awards***

Excellence in MGSS business development, planning and execution.

### ***NASA Honors Awards***

MSL Project Ops, MSL Mission System Dev, Robust Ops, MER Extended

### ***Bonus Awards***

New Frontiers Proposal, Open-source, SMAP Ops Improvement, MSL Operations Product Generation, MER Planning and Data Archiving

### ***New Technology Development***

Life Storage of Mission Data (LSMD)

Common Workflow Service (CWS)

AMMOS-PDS Pipeline Service (APPS)

APPS-Label Design Tool (LDT)

Advanced Rapid Imaging and Analysis (ARIA)

MSL Experiment Data Record (EDR) Generator

In-situ Focusing inside a Thermal Vacuum chamber

File Exchange Interface 5 (FEI5)

### ***Patents***

#### **Systems and Methods for Advanced Rapid Imaging and Analysis for Earthquakes**

Issued Dec 4, 2018 | <https://patents.google.com/patent/US10145972B2/>

### ***References***

References and additional information available upon request.