

STEVEN SAAVEDRA

| StevenSaavedra.com |

PROFESSIONAL SUMMARY

Innovative and detail-oriented Radiographic Data Analyst and Nondestructive Evaluation (NDE) Subject Matter Expert with extensive experience in computed tomography (CT) data acquisition, reconstruction, and analysis. Eight years of cumulative technical and engineering experience in NDE with expertise equivalent to ASNT Level III standards. Proven track record of leading complex failure analysis, developing advanced inspection procedures, and driving enterprise-wide workflow automation. Power user of Volume Graphics with strong cross-functional communication skills, leveraging advanced radiographic technologies to diagnose defects in electromechanical, additively manufactured, and energetic material components.

CORE COMPETENCIES & TECHNICAL SKILLS

- **Failure Analysis & NDE:** CT/X-ray Imaging, Defect Root Cause Analysis, Advanced Imaging Techniques
- **Software:** Volume Graphics (Voxel Analysis), SolidWorks (CAD), Comsol (FEA)
- **Automation:** Workflow Automation (via motion programs), Development of CT Calculator
- **Leadership:** Cross-functional Collaboration, Stakeholder Advising, Group Training, Project Engineering

PROFESSIONAL EXPERIENCE

Lawrence Livermore National Laboratory - Radiography/CT SME, 2022 - Present

- **Failure Analysis & Advanced Imaging:** Advanced CT/X-ray data acquisition, reconstruction, and analysis to identify product failure modes in support of critical U.S. national security initiatives. Developed innovative inspection strategies to achieve programmatic objectives.
- **Workflow Automation:** Drove automation of data acquisition workflows by implementing motion programs and developing "CT Calculator", an automated technique development tool (Beta available on personal website), significantly enhancing enterprise throughput and data fidelity.
- **Cross-Functional Advising:** Advise physics, chemistry, engineering, and manufacturing teams by identifying product complexities, delivering actionable solution recommendations, authoring and presenting comprehensive technical reports of intricate concepts to diverse stakeholders.
- **Technology Integration:** Researched, validated, integrated, and commissioned emerging industrial radiographic technologies and systems to expand enterprise mission critical inspection capabilities.
- **Leadership & Training:** Lead VIP tours and communicate complex failure modes and intricate NDE concepts to diverse, high-level stakeholders (NNSA, NASA, DARPA, DoW, AFRL, DHS, FBI, DIA). Training of LLNL staff and nuclear weapon enterprise partners.
- **Collaboration:** Lead contract negotiations with DoW contractors, performed system engineering for National Geospatial-intelligence Agency, provided major contributions to NNSA Polymer Enclave, performed audits and engineering evaluations of production agency QA programs, represented LLNL at enterprise partner sites and industry conventions, fostering key relationships.

Industrial Inspection & Analysis | NDE Technologist 2021 - 2022

Evaluation and FA of electronic and aerospace components in a NADCAP-accredited Laboratory.

American Society for Nondestructive Testing, Golden Gate | Vice Chair 2022 - Present

Promotion of NDE best practices, organization of industry training, and fostering of vendor relationships.

EDUCATION

Defense Threat Reduction Agency | Certification - Nuclear Weapon Orientation Course | 2025

DeVry University | B.S. - Engineering Technology, Machine Learning - 4.0 GPA | (*in progress*) 2023 - 2026

The Ocean Corporation | Certification of Specialization - Nondestructive Evaluation | 2020 - 2021

Cuesta College | Certification of Specialization - Welding Technology | 2018 - 2020