**PRINCIPAL LEAD SYSTEM ENGINEER**

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|  | **Objective Profile** |  |  |

Principal Level System Engineer with focus on Enterprise / Solution Architecture development, with opportunities for professional growth and increase responsibilities. Engineer professional with over 20 years of experience in engineering, currently holds a Top-Secret w/ Polygraph.

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|  | **Education** |  |

**Jul 2012**  **George Washington University, Washington, DC**

***Master of Science*** in Systems Engineering **|** School of Engineering and Applied Science

**Jun 1997** **Drexel University, Philadelphia, PA**

***Bachelor of Science*** in Commerce and Engineering **|** School of Commerce and Engineering Science

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|  | **Professional Certification** |  |

**SAFe™4.0 Agilist** - Scaled Agile Framework **-** 2016

**INCOSE CSEP – Certified Systems Engineering Professional -** 2018

**(MBSE) -** MODEL-BASED SYSTEMS ENGINEERING - **MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) -**2018

**OMG**-Certified System Modeling Professional (OCSMP) Level 1- 2022

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|  | **Professional Experience** |  |

**Sr. Principal System Engineer | *National Reconnaissance Office (NRO)*  Sept 2022 – Current**

**ANSER (Analytic Services Inc.) - Fairfax, VA**

Provided systems engineering and technical assistance (SETA) support to integration activities for cross-systems dependencies (technical, resource, schedule). Collaborated with National Reconnaissance Office (NRO) Directorates and Offices on architecture and requirements. Facilitated the GEOINT (geospatial intelligence) product processing technologies for incorporation into operational baselines. Applies Model-Based Systems Engineering (MBSE) techniques and tools to help client-facing teams transition to MBSE approaches.

* Working across multiple Directorates and Offices to identify and define future space capability needs.
* Frequent interaction with government SETA, FFRDC, external stockholders, and development contractors.
* Planning and executing Model-Base System Engineering (MBSE) model development in support of system engineering objectives and programs milestone.
* Developing engineer models for the purpose of architecture development, system decomposition, analysis, and other digital engineer initiatives.
* Producing model view to support milestones and documentation.
* Providing feedback for updates to methodologies, metamodels, modeling best practices and quality management processes.
* Supporting integration of architectures with other components of the technical baseline.
* Supporting efforts involving Digital Engineering (DE) and MBSE tools and procedures.
* Experience in modeling tools (Rhapsody, MagicDraw) and modeling framework (UAF, DoDAF, MoDAF) and languages (SysML, UML, MOF)

**Sr. Lead System Engineer | *F-35 Strike Program / Joint Program Office (JPO)* Feb 2020 – Sept 2022**

**Booz Allen Hamilton (bah)- Crystal City, VA (Project 2)**

Provide expertise in Model-Base System Engineering (MBSE) and integration, requirements management, and analysis supporting F-35 5th Generation Integration, evaluating future technologies and capabilities for improvements to the Joint Strike Fighter.

* Wrote a Project Charter for new capabilities insertion process into F-35 Radar System
* Lead government and contractors’ capability growth teams in identifying new technology insertion for Radars.
* Coordinate with contractors and SMEs to identify dependencies and IMPACT assessments of new capability insertions.
* Develop and executed Early Lifecycle Systems Engineering (ELSE) process pre-SRR checkpoint.
* Coordinate contractors to define a draft POA&M for new capability insertions prior to pre-SRR reviews.
* Supported acquisition related meetings with external stakeholders, with Gate Reviews and Authorization to proceed
* Apply MBSE techniques and tools to help client-facing teams transition to MBSE approaches.

**Lead System Engineer** | ***Cyber-Security / Continuous Diagnostic Mitigation* April 2019–Feb 2020**

**Booz Allen Hamilton (bah)- McLean, VA**  **(Project 1)**

Provide subject matter expertise in systems engineering and integration, requirements management, and analysis support to a variety of DoD clients and Booz Allen initiatives.

* Apply systems thinking and subject matter expertise to advance firmwide Model-Based Systems Engineering (MBSE) capabilities and training
* Apply MBSE techniques and tools to help client-facing teams transition to MBSE approaches.
* Build and mature a team of system modelers to apply MBSE practices to client projects, including developing behavior, structure, and other architectural elements using (Magic-Draw)
* Apply systems engineering best practices and current DoD systems engineering and acquisition guidance.

**Sr. Principal System Engineer** | ***National Reconnaissance Office (NRO)* Sept 2017–Feb 2019**

**Science Application International Corp. (SAIC) - Chantilly, VA**

Provided SETA support to integration activities in the context of cross- systems dependencies (technical, resource, schedule) and present unbiased findings, analysis, and recommendations to the government managers, support government requests for systems engineering and integration studies; process analysis and design; with a focus on process and resource efficiencies.

* Collaborate with other NRO Directorates and Offices on architecture and requirement
* Facilitate and help guide assessment of new GEOINT product processing technologies for incorporation into operational baselines.
* Support future technology acquisition planning
* Support Integration and development of Activity Based Intelligence (ABI)
* Participate in site SE&I lifecycle management forums, as well as related readiness planning and scheduling activities.
* Attends the formal TRR, ORR, DDR meetings, and serves as back-up to designated GPOC for briefing the customer segment Readiness status.

**System Engineer Sr. Staff** | ***National Geospatial-Intelligence Agency (NGA)* Sept 2014 –Sept 2017**

**Vencore Inc. - Chantilly, VA**

Provide System Engineering and Integration and architecture support to the Army Geospatial Center (AGC) and National Geospatial-Intelligence Agency (NGA) supporting GEOINT Enterprise architecture, through documentation and visual definition of overall set of foundational GEOINT capabilities for all Computing Environments (CEs) and all echelons of Army’s Common Operational Environment (COE).

* Collaboration with Army GEOINT stakeholders in order to provide actionable alternatives, best-fit recommendations, and developing technology solution based on trade studies, AoAs, requirements and architecture analysis.
* Collect and analyze existing Army’s Common Operating Environment (COE) artifacts, system components, CONOPS, operational capabilities, requirements and mission impacts/needs.
* Build Architecture Road-Maps that depict MOD capabilities and Systems in the “Will Be” timeline to highlight Capability Gaps and Duplications.
* Manage a Team of Architects in capturing new Task Proposals from Army.
* Direct experience with architecture and acquisition efforts within DoD and/ or the IC community.
* Working experience with architecture modeling tools (e.g. System Architect, Magic Draw18.1)

**Lead Project Engineer** | ***RDECOM- CERDEC I2WD, Trojan Branch* Oct 2013 –Sept 2014**

**DRS Technologies - Aberdeen, MD**

Identify, develop, and integrate emerging communication and networking technologies for Army C4ISR tactical edge communication systems. Working experience with IBM Rational Rhapsody (DoDAF), VISIO, DOORs.

* Collaborated with many stakeholders, both government and commercial, to satisfy National Security Agency (NSA) requirements for equipment and systems, employing DoDAF and Model Based System Engineering (MBSE) techniques and tools to define “AS-IS” and “TO-BE” C4ISR enterprise architecture products to address capabilities gaps to key stakeholders. Responsible for negotiating level-of-effort (LOE) for sub-contractors.
* Designed solution architecture products comprised of 3G/4G wireless communication, sensor, mobile device, electronic warfare and information collection, processing, storage and dissemination technologies.
* Evaluate systems, both government and commercial based on cost, schedule and risk to project and Army’s missions.

**Principal System Engineer** | ***Advanced Sensor and Analysis Division* Feb 2009–Oct 2012**

**Science Application International Corp. (SAIC) - Arlington, VA (Project 2)**

Provide System Engineering support to Defense Advanced Research Projects Agency (DARPA) and US Navy’s P-8 Advanced Airborne Sensor (AAS) Program Office in the development of a new radar tracker system for extending ground moving target indicator (GMTI) high value tracking.

* Collaborated with DARPA teams in implementation of operational analysis on risk management and modify approaches to apply balance in program priorities and resources allocation with Navy’s Program Office cost, schedule and performance objectives.
* Conduct Trade-Study evaluation for the capability of the new radar tracker systems to support (AAS) ISR requirements.
* Manage the identification and implementation of program specifications and scenarios associated with in-theater operations to support operational utility assessment (OUA).
* Participate in Open Air Range (OAR) flight test, simulation, analysis and verification activities.
* Manage the operational development of CONOP as well as the development of Test-specific CONOP and Tactics, Techniques and Procedures (TTP).
* Work with MATLAB, MOVINT Client, DOORs

**Missile Defense Agency (MDA/DEE) - Arlington, VA (Project 1 )**

* Lead the development of detailed scenarios and parameters to be utilized in Ballistic Missile Defense System-level ground tests and exercises.
* Managed the scenario database and related tools (2D-Viewer, JEDA) in order to provide support for the development and graphical depiction of scenarios.
* Provided reviews for the modeling and simulation verification and validation plans.

**Senior Test Engineer *(SETA ) | Department of Homeland******Security -DNDO Sep 2007 – Nov 2008***

**Defense Group Inc. (DGI) – Washington, DC**

Support the planning, operations and execution of T&E campaigns to evaluate the performance of nuclear and radiological detection systems.

* Provided analysis of test processes and made recommendations for improvements to facilitate timely capability delivery to users.
* Review and prepare test documentation (e.g., Test Execution Plans, Test Procedures, Test and Evaluation Plans Master Plans and Reports)
* Carried out reviews for the modeling and simulation verification and validation plan as well as threat and countermeasures requirements and related functions.
* Assisted Test manager regarding strategic T&E plans, resource planning, test program execution, and formal reporting.

**Senior Systems Engineer *(Consultant)* | *Integrated Defense Systems***  **Nov 2006–May 2007**

**Boeing Company – Hanover, MD**

System Engineering support of radar integration and test of Boeings mission computing software builds and Northrop Grumman MESA radar.

* Working with UNIX systems using SUN Solaris 8 and 10 operating systems integrating mission software builds with radar system.
* Requirement Management using DOORS database
* Responsible for developing Integration Test procedures to be implemented.
* PROJECT WORK STOPPAGE

**Senior Systems Engineer** *|* ***Aegis Ballistic Missile Defense Program***  **May 2004-Nov 2006**

**Lockheed Martin Corporation – Baltimore, MD**

* Managed software and hardware requirements of United States and Japan’s AEGIS VLS Global Positioning System (GPS) Integrator (VGI) using DOORS database.
* Handled the presentation of the GPS security requirement concept design to GPS JPO (Joint Program Office) for host application equipment (HAE) security approval.
* Implemented the mission support, which involved the preparation of statement of work (SOW), requirements and verification of Integration and Test (I&T) documents.
* Distinguished and monitored new requirements back to PIDS (Prime Item Design Specification).
* Created bases of estimates (BOE) for the Japan program.
* Develop Acceptance test requirements (ATR) documents for hardware and prepared updates to CONOP for approval from NSA (National Security Agency) as well as the design reviews to GPS Joint Program Office.
* Develop IPT Team Risk Matrix repository chart for managing and identify risk.
* Presented plans, status, and technical baseline to Navy at SDR, PDR, and CDR review.
* Performed Trade study for components utilization in the VGI system.
* Assist in system testing during the formal qualification test (FQT).
* Completed Lockheed Martin System Integration Methodology Certification course.

**Senior Systems Engineer** | ***Intelligence and Information Systems* Mar 2001-May 2004**

**Raytheon Company - Falls Church, VA**

* Performed requirement analysis and presided over the development of test plans and procedures, for electronic surveillance collection systems for US Government Agencies.
* Managed hardware and software requirements in DOORS.
* Worked in UNIX and Windows Operating Systems.
* Prepared effective plans and developed system requirements as well as test methods and procedures; determined system-engineering processes (IPDS); and kept track of new requirements back to SDD (software design document)
* Obtained Raytheon Six-Sigma certification.
* Performed the procedure of installation and checkout (INCO) test for wide-ranging Government Agency sites.

**System Engineer II | *Naval Weapons Systems Division***  **Feb 1999–Mar 2001**

**BAE Systems – Dahlgren, VA (Project 2)**

* Supported the AEGIS Command & Decision (C&D) interfacing with Tactical Tomahawk weapon Control System (TTWCS); utilized real-time processor and tactical processor and various external systems for communicating with Tactical Tomahawk Weapons Control System (TTWCS).
* Gained and maintained working knowledge of tactical and strategic communication links, such as TADIX-B, TADIX-A, OTCIXS and LINK-16.
* Participate in the Integrated Test Evaluation Planning Team (ITEP), providing system integration and test support to systems hardware and software engineers.
* Writing Test procedures in accordance with performance specifications and Interface Requirement Specifications (IRS).
* Collaborated with the government lead (COTAR) in allocating testing responsibility to government and sub-contractor facilities.

***Aegis Weapons/Combat Systems***

**BAE Systems – Marlton, NJ (Project 1)**

* Provided engineering and technical support to AEGIS Radar Weapon System.
* Actively contributed to the development of test and evaluation of the systems computer program specifications, requirements and design.
* Distinguished the extraction points, fields and their values, message types and inter-function notifications in order to prove the capability of the computer program’s support. Use of UNIX system Workbench for analysis.
* Working with COMMs protocols – LINK-11, LINK-16, working knowledge of UNIX and DOORS.
* Write Test procedures that support the Test Plan and evaluation of requirements

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|  | **Earlier Career** |  |

**Planner | *Consumer Products Companies*** **Jul 1997–Feb 1999**

**Johnson & Johnson – Skillman, NJ**

* Supervised the development of raw material from production and distribution plans for various supplies of adult and children’s liquid toiletry products.
* Promoted the utilization of MRPII systems in planning materials, creating and monitoring master production schedules, for new promotional product launch.
* Obtained proficiency in handling PC spreadsheet (Excel, Lotus) ACCESS, PowerPoint and Microsoft project.
* Streamlined the attainment of cost improvement initiatives while saving an estimated amount of $105K.
* Prepared financial analysis with regard to promotional projects and process change initiative in terms of cost.

**CELL Leader| *Aerospace Division*** **Oct 1991–Aug 1995**

**General Electric Company – Bridgeport, NJ**

* Cell Leader responsible for the development and manufacturing US Navy AEGIS Arrays Radar systems. Knowledge of process improvement tools, Flow Technology, Kaizen, JIT Action workout.
* Reduced cycle-time in building AEGIS array assemblies by more than 70%.
* Shop operation experience in PBA assembly environment.
* Responsible for loading plans into the MRPII system, tracking and expediting.
* Providing (SPC) Statistical Process Control chart and diagrams of operations to management.
* Led the implementation of plans ensuring the availability of the material and manpower in order to avoid periods of over and under staffing of people and inventory.

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|  | **Personal Information** |  |

* Speak Portuguese *(medium)*