

Vu L. Nguyen

OPERATIONS RESEARCH & SYSTEMS ANALYSIS OFFICER | DATA SCIENTIST | PROGRAM LEADER

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Active TS/SCI | Army-Designated Data Scientist (PDSI R1J)

PROFESSIONAL SUMMARY

Army ORSA officer and data scientist with 13 years of experience leading teams, managing complex programs and more than \$300M in assets, and applying AI, advanced analytics, and experimentation to joint-force challenges. **Combines integrated air defense operations, division/corps/joint wargaming, and technical product development** to translate ambiguous operational needs into practical workflows and decision-support tools under compressed timelines. M.S. in Applied Data Science from USC and B.S. in Civil Engineering from Oregon State University.

CORE EXPERTISE

Operations Research & Analytics | Data Science & Machine Learning | AI/LLM Integration | Wargaming & Experimentation | Strategic Planning | Cross-Functional Program Management | Decision Support | Integrated Air Defense

EDUCATION & CREDENTIALS

Master of Science, Applied Data Science | May 2025

University of Southern California, Viterbi School of Engineering

Bachelor of Science, Civil Engineering | Cum Laude, 2013

Oregon State University

Professional & Military Education: Army Data Scientist PDSI (R1J); Command and General Staff College / Intermediate Level Education Common Core; Civil Affairs Captains Career Course; Air Defense Artillery Officer Basic Course; Airborne Course.

PROFESSIONAL EXPERIENCE

Operations Research/Systems Analysis (ORSA) Officer | Data Scientist | Jun 2025 - Present

The Joint Staff, J-7 - Joint Wargaming & Experimentation Division | Suffolk, VA

- Apply operations research, data science, AI, and experimentation to complex joint-force challenges, supporting wargaming, strategic planning, analytical modernization, and senior-leader decision support.
- Co-lead AI integration and adoption across staff workflows; develop implementation and strategy products, reusable prompt templates, and training on AI literacy, responsible use, and practical AI-enabled workflows.
- Build prototypes that combine Databricks data pipelines, speech-to-text, semantic search, and LLM-enabled analysis to accelerate synthesis, reporting, and knowledge discovery.
- Assessed advanced wargaming and analytic tools through 16 stakeholder interviews and analysis of 82,000+ words of evidence, translating findings into capability gaps and investment recommendations.
- Support technology modernization for the Chairman's Globally Integrated Wargame 2026 across adjudication, analysis, player support, and multimodal workflows.
- Selected as Joint Staff J-7 Action Officer of the Quarter (2026).

Operations Manager | Training Program Lifecycle Management | Jul 2021 - Jun 2023

U.S. Army Combined Arms Center - Mission Command Training Program | Fort Leavenworth, KS

- Managed the lifecycle and delivery of large, complex division- and corps-level warfighting exercises, aligning schedules, resources, risks, and stakeholder requirements.
- Synchronized cross-functional teams and external organizations to solve ambiguous problems and deliver strategic training objectives in high-pressure environments.
- Analyzed senior-headquarters planning, communication, and decision-making processes and translated observations into recommendations and training improvements.

Assistant Plans Manager / Battery Commander | Strategic Program Leadership | Mar 2019 - Jun 2021

2-43 Air Defense Artillery Battalion, U.S. Army | *Fort Bliss, TX and Iraq*

- Led more than 75 personnel and managed over \$300M in organizational assets while directing readiness, deployment, and operations for a Patriot air defense organization.
- Developed and executed large-scale CONUS and OCONUS plans; negotiated resources, reduced operational risk, resolved competing priorities, and advised senior leaders on Patriot deployment and operations.
- Led deployed operations in Iraq, balancing mission execution, workforce readiness, logistics, and stakeholder coordination while making time-sensitive decisions under uncertainty.

ADDITIONAL LEADERSHIP EXPERIENCE

Assistant Operations Manager / Executive Officer | Cross-Functional Operations | Dec 2014 - Jan 2017

1-62 Air Defense Artillery Battalion, U.S. Army | *Fort Cavazos, TX and Bahrain*

- Coordinated personnel, maintenance, logistics, and readiness across cross-functional teams supporting Patriot air defense operations.
- Tracked program performance, facilitated collaboration, and advised senior leaders on organizational readiness, risk, and system operations.
- Supported deployed air defense operations in Bahrain by synchronizing personnel, equipment, logistics, and mission requirements.

Platoon Leader | Team and Project Management | Dec 2013 - Dec 2014

2-1 Air Defense Artillery Battalion, U.S. Army | *Camp Carroll, South Korea*

- Led a forward-stationed team responsible for integrated air defense readiness and managed approximately \$131M in Patriot equipment.
- Assigned responsibilities, developed timelines, coordinated stakeholders, and tracked workflows to improve team performance and execution.

SELECTED TECHNICAL PROJECTS

Arming for Stability | [React](#), [D3.js](#), [Mapbox](#), [deck.gl](#)

Built a modular data-storytelling platform that transforms SIPRI, UCDP/PRIO, and World Bank data into interactive choropleths, flow maps, network views, parallel coordinates, and time-based analysis.

Property Management Application | [MongoDB](#), [Python](#), [Streamlit](#)

Designed a document-oriented data model and full-stack prototype for creating, querying, updating, and organizing property records, demonstrating database design, application logic, and cloud deployment.

Country Analytics Dashboard | [D3.js](#), [JavaScript](#), [Responsive SVG](#)

Built a coordinated dashboard with interactive filters, KPI calculations, tooltips, and linked views spanning demographic, health, trade, and economic indicators.

Bigfoot Sightings Visualization | [Python](#), [Plotly](#), [Geospatial Analytics](#)

Transformed unstructured sighting reports into interactive geographic, temporal, terrain, text, and witness-pattern visualizations within a responsive web experience.

TECHNICAL SKILLS

Programming & Data: Python, SQL, R, JavaScript, HTML/CSS, Linux, statistics, machine learning, natural language processing

AI & Analytics: LLM workflows, prompt engineering, semantic search, RAG, data visualization, experimentation, operations research

Platforms & Tools: Databricks, Spark, MongoDB, Firebase, AWS, Tableau, Plotly, D3.js, Streamlit, FastAPI, Flask, Apache Tika, Git/GitHub