

📍 Richardson, TX
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📞 858-336-5817

Trevor Lang

Principal Software Engineer

EDUCATION

Masters of Science, Data Science
University of California, Berkeley
2023 - 2026

Bachelors of Science, Computer Science
University of California, San Diego
2009 - 2013

Associates, General Studies
Southwestern College
2007 - 2009

SKILLS

Programming Languages:

- Java
- Python
- C++
- Perl/Tk
- Tcl/Tk

Operating Systems/Compute Platforms:

- Linux
- VMware
- Docker
- Kubernetes
- AWS

Architecture

Language/Frameworks:

- DoDAF
- SysML
- UML

Certifications:

- Scrum Alliance – Certified Scrum Product Owner
- Amazon Web Service – Certified Cloud Practitioner

Security Clearance:

- Active TS SCI with SSBI and CI Polygraph (March 2024)

WORK EXPERIENCE

Principal Software Engineer/Mission Engineer Sept 2023 - Present
Raytheon | Richardson, TX

- Mission Software Architect for a Multi-Intelligence Event Processing System responsible for developing Artificial Intelligence/Machine Learning (AI/ML) models for use at large scale
- Responsible for development using deep learning frameworks to create and deploy highly accurate and efficient neural network models for complex data analysis and predictive tasks
- Responsible for the development of statistical analyses agents used in regression analysis and time series modeling to extract actionable insights and inform data-driven decision-making
- Responsible for effectively communicating technical concepts to diverse stakeholders, bridging the gap between technical expertise and business objectives to drive successful project outcomes

Principal Software Engineer/Product Owner Sept 2019 - Sept 2023
Raytheon | Richardson, TX

- Lead R&D Engineer: Fine-tuned a Large Language Model (LLM) for a specific customer domain
- Principal Software Engineer: Developing containerized microservices on Kubernetes in AWS cloud to support geospatial intelligence processing
- Product Owner: Managed the Embedded Software and FPGA team for resilient geospatial intelligence data intake and processing

Senior Software Engineer/Software Architect Nov 2018 - Sept 2019
Raytheon | Aurora, CO

- Software Architect: Designed a ground terminal management system for space vehicles, ensuring independent and reliable operation
- Lead Software Engineer: Developed a standalone system to control and monitor ground terminal equipment
- Lead Software Engineer: Created software for a ground terminal subsystem responsible for tracking, telemetry, and commanding of space vehicles
- Lead Software Engineer: Designed a data distribution subsystem to handle data flow to and from auxiliary payloads on space vehicles

WORK EXPERIENCE

Senior Software Engineer

Sept 2017 - Nov 2018

Raytheon/Geologics | Aurora, CO

- Senior Engineer: Software developer for a large-scale, multi-site system focused on mission planning, scheduling, and command and control
- Senior Engineer: Responsible for the design and implementation of a subsystem distributing data to external users
- Senior Engineer: Deployed and integrated systems within a virtualized local cloud operational environment
- Engaged directly with customers and external users to manage interfaces and requirements

Software Engineer

Sept 2015 - Sept 2017

Northrop Grumman, Information Systems | Aurora, CO

- Software Engineer: Developed tools for performance monitoring, trend analysis, and automation of extensive software systems
- Software Engineer: Coordinated installations, created installation procedures, and established risk mitigation plans
- Software Engineer: Responsible for troubleshooting and optimization of distributed, multi-platform inter-process communication across various internal and external interfaces

Software Engineer

Sept 2013 - Sept 2015

Northrop Grumman, Information Systems | Redondo Beach, CA

- Responsible for the development and optimization of virtualization technologies in development, test, and operational environments
- Planned resource allocation for hypervisor and virtual machines
- Ensured security, functionality, and performance of operating systems
- Conducted system engineering, integration, and testing
- Worked with Commercial Off-The-Shelf (COTS) and Free/Open-Source Software (FOSS)
- Managed distributed systems and multi-platform inter-process communication
- Implemented multi-threaded programming and parallel processing techniques

Software Engineer

June 2011 - June 2013

SAIC/RDRTec | San Diego, CA

- Aided in the development of advanced tools for the US Navy, focusing on:
 - Enhancing Inverse Synthetic Aperture Radar (ISAR) imagery classification capabilities
 - Assisting radar operators in rapidly and accurately classifying ships and small boats at ranges of 40km or more
- Assisted in the creation of automation features that:
 - Seamlessly integrate with data-driven radar control systems
 - Sort target tracks with short dwell durations (e.g., High Range Resolution - HRR) before transitioning to long-dwell ISAR mode
 - Improve discrimination between friendly and hostile vessels

MA2/E5Platoon Leading Petty Officer

June 2000 - Feb 2007

US Navy

- Deployed as assistant mission commander to Joint Special Operations Task Force - Philippines to aid and assist the Pilipino Government in neutralizing the Abu Sayyaf Group in the Jollo and Mindanao Islands.
- During Operation Iraqi Freedom, deployed to Iraq as Chief of the Guard, directly trained and supervised three Iraq Marine Officers and six Iraq Marine Platoons in combat operations on Al-Basra Oil Terminal.
- Squad leader for Interdiction Team while deployed onboard the USNS Stockham in support of the Extended Maritime Interdiction Operations. Responsible for the overall safety for the boarding party as well as the wellbeing of any detainees while onboard the USNS Stockham.