Chris Roche

Dallas, Texas

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SUMMARY

As a Principal Software Engineer with Raytheon, I have worked as a Software Architect, Product Owner, and Scrum Master. I excel at taking complex software products from requirements derivation to design, development, integration, and delivery. Extensive experience interacting with customers and other engineering and business disciplines. I am a fast learner with strong analytical and problem solving skills. I have a high work ethic and enjoy being challenged. A lifelong learner passionate about bringing new technologies from design to reality. Certified Scrum Master and former United States Marine with an active Secret security clearance.

PROFESSIONAL EXPERIENCE

Raytheon, an RTX Business   **McKinney, Texas**
Principal Software Engineer   *May 2017 – Present*

- Software product technical lead, Architect, Product Owner, and Scrum Master on franchise programs
- Oversee day-to-day software efforts of multiple teams through various product life-cycle phases and milestones
- Regularly assists other engineering disciplines with requirements development, system design, integration, technical documentation
- Extensive experience in customer facing roles, technical communication, and presentation
- Lead system integrator on an emerging product; experienced in ground and flight tests
- Strong background in System Architecture, System Integration & Test, Root Cause Corrective Action
- Software Cost Estimation and Basis of Estimate for programs and proposals
- Experience deploying and running Agile at Scale
- Advanced technical education courses in Software Architecture, Principles of Systems Engineering, Machine Learning, and Electro-Optical Infrared systems
- Multiple Achievement Awards for technical leadership and program contributions
- Software Engineer of the Month in Business Unit for technical contributions

United States Marine Corps   **Jacksonville, North Carolina**
Intelligence Team Leader   *February 2007 – February 2012*

- Trained and led a ten-person team in a combat zone
- Intelligence Chief in a combat zone
- Routinely coordinated with and advised military and government agency leaders throughout the world
- Awarded Navy and Marine Corps Achievement Medal for excellence

RELEVANT SKILLS

Environments	Linux, Windows, Real-Time Embedded Systems
Programming Languages &	C, C++, Python, R, Bash, Cuda, OpenCL
Tools	Git, Jenkins, CMake, Eclipse, Visual Studio, SonarQube, Coverity, gtest, Atlassian suite, CI Pipelines
Machine Learning	EDA, NLP, Time Series, TensorFlow, Deep Learning, Machine Learning for Embedded Systems

EDUCATION

Southern Methodist University   **Dallas, Texas**
M.Sc in Data Science, Concentration in Machine Learning   *August 2022*
GPA: 4.00, Cum Laude

University of North Texas   **Denton, Texas**
B.Sc in Computer Engineering, Minor in Mathematics   *May 2017*
GPA: 3.76, Cum Laude

ACADEMIC PROJECTS

Master's Thesis and Capstone Project   *January 2022 – August 2022*
- Automated Essay Evaluation and Student Feedback System using Natural Language Processing and Multi-Armed Bandit Recommender Engine

PUBLICATIONS

- Chris Roche, Nathan Deinlein, Darryl Dawkins: *Using Natural Language Processing to Increase Modularity and Interpretability of Automated Essay Evaluation and Student Feedback* published in the SMU Data Science Review, Volume 6, 2022

VOLUNTEER ACTIVITIES

- Asst. Coach, McKinney Little League (October 2022 - Present)
- Judge, Invention Convention U.S. Nationals (Multiple Years)
- Judge, NASA Name the 2020 Rover (January 2020 - March 2020)

INTERESTS

Emerging Technologies, Defense Industry, Machine Learning, Data Analysis, Baseball