

SCOTT ROBERTSON

Real-Time 3D, XR & Autonomy for Defense and Aerospace

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Security Clearance: Prior Secret (lapsed; eligible for reinvestigation with employer sponsorship)

SUMMARY

Engineer with 18+ years across real-time 3D, XR, embedded autonomy, and defense hardware integration, comfortable operating as a hands-on individual contributor or leading a small cross-disciplinary team. Built VisAR, an award-winning AR guidance system at Lockheed Martin Skunk Works that cut assembly error rates by an estimated 80% and roughly doubled assembly speed. Most recently integrated Hivemind autonomy onto third-party drone hardware for an international defense customer at Shield AI. Pairs deep C++/C# and engine-level experience with modern AI-assisted tooling to move fast without sacrificing production quality.

SKILLS

Languages: C#, C++, C, HLSL, Python, JavaScript, HTML, PHP, CSS

Engines: Unity (Certified Expert Developer), Unreal Engine, Godot

Autonomy & Embedded: VTOL platforms, flight controllers, edge compute, mesh radios, SITL / HITL environments

Real-Time 3D & Simulation: AR/VR guidance & training systems, digital twins, spatial computing, virtual prototyping, performance optimization

Leadership: Cross-discipline team leadership (10+ engineers), technical mentoring, classified program delivery

Platforms: HoloLens (1 & 2), Quest (2/3/Pro/3S), Pico (3/4/Ultra), PIMAX Crystal, HTC (Vive/Focus), Windows, RedHat Linux, Ubuntu, macOS, WebGL / WebXR

EXPERIENCE

Owner / Operator | ScoTeck LLC

September 2025 - Present

- Founded an independent technical consultancy specializing in rapid prototyping, technical architecture, and immersive solutions; landed a \$20K project in the first month
- Delivered full-stack projects spanning real-time 3D, AR/VR, and web-based immersive experiences, including client relationships and business operations

Senior Technical Manager | Shield AI

February 2026 - July 2026

- Integrated third-party hardware onto the Hivemind autonomy stack for the Republic of Singapore Air Force, part of Shield AI's RAiD partnership
- Moved the integration from lab testing through SITL and into HITL in the field, closing with full customer sign-off to proceed to the next program phase
- Worked hands-on with VTOL platforms, flight controllers, edge compute, and mesh radios
- Created F8 ("first 8 hours"), an onboarding initiative that shortened the path from no Hivemind SDK experience to a first real flight, for internal engineers and customer training alike
- Co-built the tooling and documentation behind it, from installation and configuration through deployment and in-field debugging, including live radio monitoring
- Took over an existing engineering team two weeks into the role and led it through a company re-organization, drafting the scope and ownership definitions used to structure the new org, which split the work into three regional teams
- Identified, sourced, and configured the tool and workflow improvements that centralized planning and documentation for the teams (JIRA, Confluence)

CEO & Co-Founder | Dimension X

June 2022 - September 2025

- Built Bonfire, a no-code platform that let non-technical creators author real-time 3D content by drag-and-drop and deploy it in one click to desktop, mobile, and XR headsets - one install, virtually any hardware platform.
- Grew a cross-functional engineering team from zero to 10+, including internationally distributed contractors, with full P&L and product strategy ownership; raised over \$1M in outside funding
- Established a channel partnership with PIXO VR and delivered enterprise engagements for a Fortune 500 manufacturer, one of the largest US restaurant chains, and a national real-estate platform
- Expanded internationally with a smart-city program in Saudi Arabia
- Chose an orderly wind-down in September 2025 rather than commit remaining investor capital to a protracted intellectual-property dispute

Staff Virtual Prototyping Engineer | Lockheed Martin - Skunk Works

June 2017 - June 2022

- Built VisAR, an award-winning AR assembly-guidance system that cut assembly error rates by an estimated 80% and roughly doubled assembly speed
- Led development of BattleViz, the mission-systems interface for the JADO Big Bet program, culminating in direct demonstrations to Lockheed's CTO and multiple military customers
- Integrated AFSIM with in-house and third-party simulations, including software identical to fielded systems, to stand up multi-domain wargames spanning space, air, sea, land, and cyber over DIS, HLA, and custom protocols
- Extended the high-fidelity F-35 simulator for two-way integration with BattleViz, bridging memory-layout and endianness mismatches between C# (JIT) and C++ (AOT) code
- Brokered a Lockheed-funded Unity collaboration that produced Unity's High Precision Framework and round-earth globe capability (later released publicly), enabling a WGS84-accurate globe with streamed and cached terrain and elevation data across unclassified and classified environments
- Built InfoVis, a custom enterprise wrapper on Lattice3D XVL that added workflow management for technician maintenance and repair, with CPU-optimized rendering for shop-floor hardware
- Orchestrated a three-way partnership between Amazon, Unity, and Lockheed Martin, resulting in a company-wide Unity license deal
- Grew from individual contributor to leading a 10+ person, geographically distributed engineering team

Founder / Owner-Operator | Graphic Arts and Technology United (GATU)

June 2008 - June 2017

- Ran a real-time 3D technology consultancy for commercial clients, anchored by the Vision Therapy Suite (HTS, SVI, VTS4)
- Co-developed internationally distributed vision therapy applications across HoloLens, Wii Balance Board, and active-shutter 3D, backed by optometrist science
- Built and maintained a profitable consulting practice serving the serious-games technology sector

EDUCATION & CERTIFICATIONS

BS, Technical Management (Computer Information Systems)

DeVry University | 2012

Unity Certified Expert Developer

Unity Technologies | 2021

Unity Certified Developer

Unity Technologies | 2016

CompTIA A+

CompTIA | 2013