

Artem Davtyan

Senior Software Engineer & Architect | Cloud-Edge Platforms | Industrial Automation | U.S. Patent Co-Inventor

artem@davtyan.dev | New Port Richey, FL | davtyan.dev | linkedin.com/in/mr-davtyan

SUMMARY

Senior Software Engineer and Architect with 10+ years of experience leading distributed cloud-edge systems that connect continuous computer vision, secure networking, fleet operations, and cloud services across production logistics facilities.

Scope and impact: hundreds of concurrently active RTSP streams fleet-wide across multiple production facilities; zero-touch edge fleet operations; two granted U.S. patents; and an 80% reduction in manual infrastructure audit effort through automation.

PATENTS & RECOGNITION

Control System for Container Terminal and Related Methods

US12254439B2 | Granted Mar 18, 2025

Co-inventor of an AI-powered logistics platform for automated container inventory and operational decision-making.

Stacked Shipping Asset Optimization System

US12391478B2 | Granted Aug 19, 2025

Co-inventor of a computer-vision and geospatial platform for stacked-container tracking and inventory optimization.

Service & Solutions Employee of the Year 2023 - ConGlobal

Awarded Mar 2024

Recognized for technical leadership, innovation, and contributions to customer-facing logistics solutions.

EXPERIENCE

Aviro360 - Senior Software Engineer & Software Architect

Nov 2025 - Present | Odessa, Florida

- Architected a distributed Edge AI platform processing hundreds of concurrently active RTSP streams fleet-wide across NVIDIA Jetson devices, enabling real-time vehicle detection, OCR, event processing, and operational visibility across multiple production logistics facilities.
- Designed secure cloud-edge communication that eliminated long-lived credentials through AWS STS, WireGuard, and hardware-based authentication.
- Unified fleet management and zero-touch deployment across geographically distributed edge systems, centralizing configuration, updates, container lifecycle, telemetry, and operational monitoring.
- Led architecture and design reviews across software, infrastructure, and operations stakeholders from design through production support.

ConGlobal - Senior Software Engineer & Software Architect

Jul 2023 - Nov 2025 | Odessa, Florida

- Architected distributed Edge AI pipelines performing OCR, object detection, and multi-stage inference, with GraphQL/WebSocket services aggregating events from independent nodes into centralized cloud systems.
- Architected a real-time geospatial platform using Django and PostGIS that fused GPS, IMU, and computer vision data for container localization, parking-space identification, equipment visualization, and yard analytics.
- Standardized NVIDIA Jetson fleet deployment through automated provisioning, storage configuration, containerized software rollout, and build pipelines.

Communication Concepts Integration - Software Developer

Jun 2021 - Jul 2023 | Odessa, Florida

- Designed production computer vision pipelines for vehicle detection, OCR, object tracking, and inventory automation, enabling real-time operational workflows across transportation and industrial environments.
- Built event-driven backend services that integrated cloud APIs, GraphQL subscriptions, and physical automation hardware to enable real-time gate control and operational event processing.
- Developed internal ML data tooling and reusable Docker images for NVIDIA TAO, DeepStream, CUDA, and OCR workflows, improving model preparation and deployment consistency.

EXPERIENCE CONTINUED

IPG Photonics - Software Engineer

Jun 2018 - Jun 2021 | Oxford, Massachusetts

- Designed a multiprocessing desktop application in Python and PyQt5 that simulated complex laser configurations, reducing troubleshooting time and lowering warranty-related costs.
- Built real-time data acquisition and PySpark/Pandas ETL pipelines for concurrent electrical and optical signals, supporting laboratory diagnostics, research, and manufacturing analytics.

IPG Photonics - IT Systems Developer

Aug 2016 - Jun 2018 | Oxford, Massachusetts

- Developed Python automation tools that audited Active Directory environments, security policies, and enterprise infrastructure, reducing manual review effort by approximately 80%.
- Built a Django/PostgreSQL infrastructure-management application and automated workstation provisioning with PXE, Ansible, and Linux tooling.

INDEPENDENT PRODUCTS

CivicsTests

Founder & Developer

Production U.S. civics study platform with personalized practice and automatically updated state content. **Stack:** Next.js, TypeScript, PostgreSQL, Prisma, Docker. civicstests.com

BraggLive

Founder & Developer

Client-side Fiber Bragg Grating simulation and analysis using WebAssembly and Web Workers. **Stack:** AssemblyScript, TypeScript, Wasm, Plotly.js. bragglive.com

EDUCATION

National University of Science and Technology "MISIS" (Moscow Institute of Steel and Alloys)

Sep 2004 - Jul 2010

Bachelor of Engineering - BE (Computer & Systems Engineering)

SKILLS

Languages & Frameworks: Python, TypeScript, JavaScript, SQL, Bash, FastAPI, Django, Flask, REST APIs, GraphQL, WebSockets, React, Node.js

Distributed & Cloud: Edge AI, Distributed Systems, Microservices, Event-Driven Architecture, Redis, RabbitMQ, AWS (IAM, STS, ECR, S3, Cognito), Docker, Kubernetes, Linux, CI/CD

Vision & Systems: NVIDIA DeepStream, OpenCV, CUDA, GStreamer, Computer Vision, OCR, Object Detection, NVIDIA Jetson, PostgreSQL, SQLite