NICOLÒ LAGRAVINESE

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LinkedIn| GitHub| Portfolio

Available: *January 1, 2026 – August 31, 2026*

SUMMARY

Technical engineer with full-stack, cloud, and hardware integration experience. Built and deployed production monitoring platforms to Kubernetes using Docker, Helm, Argo CD, and GitHub Actions, ensuring scalable and reliable delivery. Specialized in creating real-time dashboards and internal tools that improve reliability and team efficiency. Experienced in hardware engineering through the design and integration of Tulip demos and custom demo travel kits, including conveyors, pick-to-lights, and vision systems. Combines UX and interaction design expertise with solid engineering skills to deliver intuitive interfaces, usable data visualizations, and resilient edge-to-cloud systems using OPC-UA and MQTT.

TECHNICAL SKILLS

Languages: C#, HTML/CSS, Java, JavaScript, Kotlin, Python, R, SQL, TypeScript

Frameworks/Libraries: React, Node.js, Express, Unity 3D, Vite

DevOps/Cloud: Docker, Kubernetes, Helm, Argo CD, GitHub Actions, TLS/cert-manager, Vault

Platforms/Data: AWS ECR, CloudWatch, Redshift, Snowflake

AI & Computer Vision: Cursor, GitHub Copilot, OpenAI APIs, Tulip AI Composer, MCP server, LandingAI

APIs/Integrations: REST APIs, Tulip Connectors, MQTT, OPC-UA

Industrial/IoT: Sensors, pick-to-lights, cameras, automation rigs, custom demo rigging

Design & UX: Figma, Illustrator, InDesign, Photoshop, UI design, prototyping, data visualization

Version Control/PM: GitHub, GitLab, Jira

EXPERIENCE

Tulip Interfaces — Product Support Engineer (Part-Time) | Boston, MA | *July 2025–Present*
• Provide comprehensive technical support across databases, networking, UI, cloud, IoT, microservices, QA, and hardware systems
• Triage and resolve critical issues by analyzing logs, debugging distributed systems, and collaborating with TechOps, Product, and Engineering teams
• Build internal tooling and automations to streamline workflows and improve incident response times
• Contribute public-facing solutions in the Tulip Community and maintain knowledge base documentation
• Coordinate complex TEC demo issues and custom integrations for escalated cases

Tulip Interfaces — TEC Hardware/Software Engineer Co-op | Boston, MA | *January 2025–June 2025*
• Primary developer of Mission Control 3.0: Full-stack React SPA with 3D visualization, Node.js/Express API, and Redshift analytics
• Deployment & Infrastructure: Deployed to Garden 11 Kubernetes cluster via Helm and Argo CD; implemented CI/CD with GitHub Actions to AWS ECR
• Infrastructure Management: Managed Vault secrets, TLS with cert-manager, liveness/readiness probes, and CloudWatch logging
• Data Analytics: Designed dashboards tracking weekly active users, editor minutes, event activity, and machine engagement metrics
• Demo Engineering: Built multidisciplinary TEC demos under tight timelines including conveyors, pick-to-lights, Andon lights, and Cognex cameras
• Hardware Integration: Adapted and custom-rigged hardware beyond specifications while maintaining demo reliability
• Custom Development: Developed custom JavaScript widgets and integrated industrial hardware with Node-RED and MQTT/OPC-UA protocols
• Global Support: Supported international tradeshows including World Economic Forum, Automate, and Honeywell World Tour

Northeastern University — IT Specialist (MIE Department) | Boston, MA | *September 2024–December 2024*
• Maintained computing infrastructure and provided hardware/software troubleshooting support for faculty research projects

Kinnaly Labs — Algorithm Developer Intern | UC Davis | *February 2024–May 2024*
• Developed algorithms to organize biobehavioral aging data and extract statistical patterns for research analysis

Caraluzzi's Markets — Retail Specialist | Bethel, CT | *June 2023–August 2023*
• Managed inventory levels and front-end store operations to optimize customer service delivery

EDUCATION

Northeastern University (Dean's List) | Boston, MA | Expected *01/2027*
BS Computer Science & Interaction Design, Minor in History | GPA: 3.51

PROJECTS

Jewelry/Retail Management Platform | *08/2025–Present*
• CRM with repair workflow tracking, SMS/email alerts, QR/barcode receipts
• Tech stack: React, Node.js/Express, REST APIs, SQL database

Mission Control 3.0 — Tulip Interfaces | *2025*
• Full-stack monitoring platform: React SPA with 3D visualization, Node.js API, Redshift analytics
• Kubernetes deployment using Docker, Helm, Argo CD; CI/CD via GitHub Actions to AWS ECR

TEC Demo Engineering — Tulip Interfaces | *2025*
• Built live demos for executive tours: conveyors, pick-to-lights, Andon lights, Cognex vision systems
• Authored Node-RED flows and Tulip connectors; trained LandingAI models for defect detection/OCR
• Built reusable KPI widgets and demo UX components with documentation

Nurture Nest — Maternal Health App | *2025*
• Contributed to UX design in Figma and front-end development of a health info and monitoring app
• Catered to communities in Ghana to improve maternal health awareness and access to resources

Game Development | *2024*
• Unity 3D projects: Whispers of the Abyss (dungeon-horror), Hellfire at High Noon (FPS)
• Java recreations of NYT Spelling Bee and Red7

ACTIVITIES & INTERESTS

• UX Developer & Researcher — IGH (Humanitarian Technology)
• NJROTC Squad Leader — 75+ community service hours
• Console hardware modification and optimization
• Game modding, scripting, and custom software development
• Loves tennis, lifting, photography, music, & cheese