

NICOLO LAGRAVINESE

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PERSONAL SUMMARY

Technical engineer with full-stack, cloud, and hardware integration experience. Built and deployed production monitoring platforms with React, Node.js, Docker, Kubernetes, Helm, and Argo CD. Create real-time dashboards and internal tools that improve reliability and team efficiency. Blend UX and interaction design with solid engineering to ship intuitive interfaces, usable data visualizations, and resilient edge-to-cloud systems using OPC-UA and MQTT.

SKILLS

- C#
- HTML/CSS
- Java
- JavaScript
- Kotlin
- Python
- R
- SQL
- TypeScript
- React
- Node.js
- Express
- Unity 3D
- Vite
- Docker
- Kubernetes
- Helm
- Argo CD
- GitHub Actions
- TLS/cert-manager
- Vault
- AWS ECR
- CloudWatch
- Redshift
- Snowflake
- GitHub
- GitLab
- Jira
- Cursor
- GitHub Copilot
- OpenAI APIs
- Tulip AI Composer
- MCP server
- LandingAI
- REST APIs
- Tulip Connectors
- MQTT
- OPC-UA
- Sensors
- Pick-to-lights
- Cameras
- Automation rigs
- Custom demo rigging
- Figma
- Illustrator
- InDesign
- Photoshop
- UI design
- Prototyping
- Data viz
- Cross-stack debugging
- Software troubleshooting
- Technical writing/documentation

EXPERIENCE

Product Support Engineer (Part-Time)

Tulip Interfaces | Boston, MA | Jul 2025-Current

- Provide end-to-end technical support across databases, networking, UI, cloud, IoT, microservices, QA, and hardware.
- Triage and resolve critical issues by analyzing logs, debugging distributed systems, and partnering with TechOps, Product, and Engineering.
- Build internal tooling and automations to streamline workflows and improve incident response times.
- Contribute public-facing solutions in the Tulip Community and add to the knowledge base.
- Coordinate complex TEC demo issues and custom integrations when escalated.

TEC Hardware/Software Engineer Co-op

Tulip Interfaces | Boston, MA | Jan 2025-Jun 2025

- Primary developer of Mission Control 3.0: React SPA (3D visualization), Node.js/Express API, Redshift analytics.
- Deployed to the Garden 11 Kubernetes cluster via Helm and Argo CD; CI/CD with GitHub Actions to AWS ECR.
- Managed infra: Vault secrets, TLS with cert-manager, liveness/readiness probes, CloudWatch logging.
- Designed dashboards for weekly active users, editor minutes, event activity, and machine engagement.
- Built multidisciplinary TEC demos under tight timelines: conveyors, pick-to-lights, Andon lights, Cognex cameras.
- Adapted and custom-rigged hardware beyond spec while maintaining demo reliability.
- Developed custom JS widgets (e.g., Progress Circle) and integrated industrial hardware with Node-RED and MQTT/OPC-UA.
- Supported global tradeshows such as the World Economic Forum, Automate, and the Honeywell World Tour.

IT Specialist (MIE Department)

Northeastern University | Boston, MA | Sep 2024-Dec 2024

- Maintained computing infrastructure, troubleshooting hardware and software for faculty research.

Algorithm Developer Intern

Kinnaly Labs | UC Davis | Feb 2024-May 2024

- Developed algorithms to organize biobehavioral aging data and extract statistical patterns.

Retail Specialist

Caraluzzi's Markets | Bethel, CT | Jun 2023-Aug 2023

- Managed stock levels and front-end store operations to enhance customer service.

EDUCATION

BS: Computer Science & Interaction Design

Northeastern University | Boston, MA | Expected in Jan 2027

- Relevant Coursework: Fundamentals of CS 1-2, Discrete Structures, Object-Oriented Design,

Algorithms and Data, Game Programming, Foundations of Data Science, Fundamentals of Software Engineering (in progress); Design courses including Color and Composition, Design Perspectives, Design Processes and Practices, Designing Interactive Experiences, Graphic Design Principles, Typographic Systems, Modern Art and Design History (in progress); Psychology; History of Technology (in progress); Colonialism and Imperialism.

- GPA: 3.51

ADDITIONAL INFORMATION

Tennis, fitness and strength training, video game software and hardware modding, film, jewelry, photography, music

WEBSITES, PORTFOLIOS, PROFILES

- LinkedIn
- GitHub
- Portfolio

PROJECTS

Mission Control 3.0 - Tulip Interfaces, 2025, Full-stack monitoring platform with React SPA (3D visualization), Node.js/Express API, and Redshift analytics., Deployed on Kubernetes with Docker, Helm, and Argo CD; CI/CD via GitHub Actions to AWS ECR., Infra: Vault for secrets, TLS via cert-manager, health probes, CloudWatch monitoring. TEC Demo Engineering - Tulip Interfaces, 2025, Built and supported live demos for executive and customer tours., Fabricated fixtures and metal framing; mounted hardware and routed cables., Wrote Tulip apps and triggers for station logic, timing, error states, resets, health checks., Authored Node-RED flows and Tulip connectors for Banner PTL110, smart plugs, scales, Andon lights; configured Cognex jobs., Trained and deployed LandingAI models for defect detection, OCR, and part verification., Built reusable custom widgets for KPIs and demo UX; wrote usage docs and maintained versions. Jewelry/Retail Management Platform - Full-Stack Developer, 2025, CRM for jewelry/retail: repair workflow tracking, SMS/email alerts, searchable histories, QR/barcode receipts., Tech: React, Node.js/Express, REST APIs, SQL or CSV export, basic auth. Game Development (Unity & Java), 2024, Whispers of the Abyss: Unity 3D dungeon-horror (C#)., Hellfire at High Noon: Unity 3D FPS prototype., Java recreations of NYT Spelling Bee and Red7. Branding & Design, Ongoing, Produced UX/UI and graphic assets for clients and personal projects using Figma and Adobe Suite.

AVAILABILITY

01/01/26, 08/31/26

EXTRACURRICULAR ACTIVITIES

UX & Fullstack Developer and Researcher - IGH (humanitarian tech) Campus Sustainability Specialist - Eco-Representative and Greenovation Club NJROTC Squad Leader with 75+ hours of community service CPR Certified

REFERENCES

Available upon request.