EVER ESPINOZA

SOFTWARE DEVELOPER | AUTOMATION BUILDER

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PROFESSIONAL SUMMARY

Automation-focused software developer with more than 20 years of precision-manufacturing experience and a record of turning operational problems into tested tools. Defines requirements and directs, validates, and deploys web, desktop, VBA, database, and CNC-macro solutions with a focus on safety, maintainability, and clear operator workflows. Brings production discipline, domain expertise, and hands-on troubleshooting to AI-assisted software development.

PROJECT TECHNOLOGIES

Application & Web: Python, Flask, Flet, HTML, CSS, JavaScript, TypeScript, Astro, JSON

Automation & Data: Excel VBA, Microsoft Access, workflow automation, data validation, report generation

Engineering: FANUC Custom Macro B, G-code, CNC process design, blueprint interpretation, precision inspection

Delivery: Git, GitHub, test planning and validation, responsive design, static deployment, AI-assisted development workflows

SELECTED SOFTWARE & AUTOMATION PROJECTS

Gage Block Calculator | *Python, Flask, HTML/CSS/JavaScript*

- Designed, directed, tested, and deployed a mobile-ready web calculator that finds valid combinations from an 80-size inch gage-block set for targets from 0.0500 to 1.0000 inch.
- Defined exact validation and combination requirements, guided iterative debugging, expanded permanent coverage to 55 automated tests, and verified the tool on phone, tablet, desktop, and the shop floor.

BalanceGuard v1.0 | *Python, Flet, JSON*

- Designed and delivered a desktop cash-flow forecasting application that projects balances, upcoming bills, and GREEN/YELLOW/RED cushion status.
- Directed module-relative persistence and validation behavior; released v1.0 after 45 automated tests plus startup, dependency, and human-interface verification.

Ever.dev | *Astro, TypeScript, HTML/CSS, Cloudflare Pages*

- Designed, directed, tested, and deployed a responsive static portfolio with accessible navigation, project case studies, and a five-chapter interactive career timeline.
- Defined requirements for a minimal browser-JavaScript boundary, responsive AVIF/WebP delivery, automated route and behavior tests, and production security headers.

CNC Macro Automation | *FANUC Custom Macro B, G-code*

- Designed and machine-validated a parameterized Safe Peck Drill macro with input checks, controlled retracts, final-depth clamping, and configurable tool-depth protection.
- Developed controller-aware prototypes for repeat bar-stock production, automatic work-offset shifting, and standardized soft-jaw ID boring; documented legacy-control deployment constraints rather than overstating implementation.

PROFESSIONAL EXPERIENCE

Dover Cook | Senior CNC Machinist III

December 2024 - Present | Houston, Texas

- Set up, program, and operate CNC equipment to produce components for multi-part industrial sealing assemblies used in compressor applications.
- Machine cast iron, aluminum, stainless steel, and other materials while adapting tooling, feeds, speeds, and machining strategy to material behavior and print requirements.
- Apply programming and automation thinking to improve repeatability, safety, troubleshooting, and operator clarity while protecting employer-specific dimensions and code.

Gulf Coast Bearing & Seals | CNC Machinist Programmer

2023 - 2024 | Houston, Texas

- Owned jobs end to end from blueprint and raw material through FANUC 21i programming, tooling, setup, machining, inspection, and finished-part delivery.
- Created G-code from scratch at the machine control and independently manufactured precision split bearings, including components with Babbitt bearing material.
- Earned a raise after demonstrating the ability to complete varied, difficult assignments with minimal supervision.

EGC Critical Components | CNC Machinist II

2018 - 2023 (multiple engagements) | Houston, Texas

- Set up and programmed FANUC RoboDrill, multiple Haas machines, and Mori Seiki CNC equipment while managing several machines concurrently.
- Produced high-precision components from PEEK, PTFE/Teflon, and other engineered plastics, including 3-piece Tangent seals, miniature aerospace seals, and medical components.
- Adapted advanced CNC logic into clearer line-by-line programs that production operators could understand and run reliably; supported setup and troubleshooting across the team.

Nailor Industries - Energistics Laboratory | Laboratory Technician & Automation Developer

2014 - 2019 | Houston, Texas

- Performed HVAC laboratory testing, data acquisition, electric-heat testing, pressure-drop analysis, procedure development, and calibration support.
- Self-taught Excel VBA and automated multi-spreadsheet laboratory reports, transforming repetitive manual work into reusable workflows.
- Built an Access-based document-control application for SOP revision management and collaborated with laboratory leadership on automation and reporting tools.

EARLIER TECHNOLOGY EXPERIENCE

Tri-Max | Database Administrator / Business Systems Developer

- Designed an Access/VBA cash-flow decision-support system covering bank balances, payables, receivables, loans, payroll, check printing, and daily what-if reporting.

Inventec Electronics | Electronics Technician -> Process Engineer

- Troubleshot laptops, desktops, and servers; advanced into process engineering to create work instructions and improve pilot-production workflows.

Compaq Computer Corporation | Computer Technician

- Built and tested computer systems in a high-volume manufacturing environment, establishing an early foundation in hardware, quality, and technical problem-solving.