

# Alexander Nagy

Manufacturing & Process Engineer Austin, TX • alexanderjnagy@gmail.com • 580-341-0238 • [LinkedIn](#)

## Professional Summary

Versatile mechanical engineer with expertise in optimizing manufacturing processes, designing and validating electromechanical systems, ensuring quality and compliance in production environments, and advancing engineering initiatives through analytical rigor, structured experimentation, and continuous improvement.

Adept at strengthening operational readiness through disciplined verification pipelines, hazard-based risk analysis, and transparent performance reporting. Skilled in transforming ambiguous requirements into practical workflows, implementation guides, decision frameworks, and field-ready playbooks that accelerate adoption and efficiency. Strategic thinker with meaningful experience across mechanical engineering, manufacturing operations, and process development; competent in driving enhancement through technical breadth, systematic problem-solving, and consistent delivery of evidence-backed solutions.

## Areas of Expertise

- **Process & Manufacturing:** Process Engineering & Optimization, Manufacturing Process Development, System Analysis & Optimization
- **Methodologies:** First-Principles Problem Solving, Verification & Validation Methodologies, Testing & Debugging Methodologies
- **Risk & Documentation:** Risk & Failure-Mode Analysis, Technical Documentation & Playbooks, Software & Tooling Development

## Career Experience

### Process Engineer, Apple Programs (via Flex)

Apple | Austin, TX | 2022 — 2025

Supported audit readiness and traceability by maintaining documentation, test plans, and structured issue-tracking for controlled manufacturing environments. Managed documentation including work instructions, process maps, build reports, control plans, and qualification data supporting certification.

**Key Achievements & Contributions:** \* Drove fixture repeatability and manufacturing precision by interpreting complex specs/drawings, validating compliance, and supporting high-accuracy tooling requirements.

- Reduced process drift and metrology failures through structured root-cause analysis and targeted corrective actions that restore fixture performance.
- Accelerated resolution of tooling and quality issues by coordinating with internal teams and external vendors to protect production schedules.

### Engineering Operations Director

Mark Rober | Sunnyvale, CA | 2019 — 2022

Delivered reliable electromechanical systems meeting performance and safety targets by leading end-to-end design, build, and validation with integrated controls and sensors. Collaborated with executives, product leaders, and external partners to align engineering initiatives with business priorities and accelerate technology

development.

**Key Achievements & Contributions:** \* Elevated component quality and assembly accuracy by coordinating vendors, contractors, and suppliers through strict specifications and acceptance criteria.

- Reduced program delays and technical risk through structured testing, rapid issue triage, and aggressive mitigation planning under compressed timelines.

## Manufacturing Engineer

**BlastPro Manufacturing** | Oklahoma City, OK | 2018 – 2019

Addressed fabrication and quality issues quickly by partnering with machinists, fabricators, and suppliers to align capability, tolerances, and process constraints. Coordinated cross-functional teams to resolve design issues, improve manufacturability, and support engineering change initiatives.

**Key Achievements & Contributions:** \* Decreased cost and boosted build efficiency by reducing part count and simplifying mechanical architectures.

- Improved manufacturability, reliability, and assembly quality by owning design-through-production of industrial equipment and producing GD&T-driven drawings and build documentation.

## Operations Director

**Hammertime Home Renovations** | Norman, OK | 2016 – 2018

Applied technical insights and production methods to optimize project outcomes and enhance customer satisfaction. Developed strategic workflows to streamline estimating, approvals, materials sourcing, and site coordination to maintain timelines and meet client expectations.

**Key Achievements & Contributions:** \* Improved quality and client satisfaction by enforcing standards, verifying work, and resolving issues.

- Delivered projects on time and to specification by managing scheduling, procurement, contractor coordination, and cross-team communication.

## Additional Experience

- **Test Engineer** – Volcon ePOWERSports | Round Rock, TX | 2022

## Education

**Bachelor of Science in Mechanical Engineering** University of Oklahoma