

Zachary W. McIlvoy

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Technical leader driving large-scale automation and robotics initiatives across global fulfillment networks. Proven success leading multi-hundred-million-dollar programs integrating advanced hardware systems into live operations. Expert at aligning engineering, operations, and product teams to deliver scalable, supportable, and cost-efficient automation solutions.

EDUCATION

Texas A&M University, College Station, TX

Bachelor of Science in Industrial Engineering, Minor in Business

May 2017

EXPERIENCE

Amazon Robotics

Technical Program Manager

May 2022 – January 2026

- Lead \$1B global portfolio of automation retrofit programs delivering the next generation of tote-based automation across Amazon's fulfillment network.
- Drive cross-functional execution with engineering, safety, product, and operations leaders, managing roadmap priorities, dependencies, and executive-level decision support.
- Deployed multiple large-scale Beta pilots, influencing adoption strategy and securing leadership buy-in for system-wide rollout.
- Own critical workstreams including maintenance strategy, supportability standards, and retrofit integration into live operational environments with zero disruption.
- Define operational KPIs, risk frameworks, & retrofit playbooks now standard for new automation deployments.
- Partner with leadership to shape long-term automation strategy balancing innovation with operational readiness

Amazon Robotics

Engineering Project Manager

July 2021 – May 2022

- Directed robotics build-outs for Amazon's Sub-Same-Day (SSD) network, managing projects from design through onsite execution.
- Coordinated engineering, construction, operations teams to deliver robotics installations on time and budget.
- Implemented scalable deployment processes that reduced commissioning timelines and improved consistency.
- Delivered high-impact projects expanding Amazon's <1-day delivery footprint into new markets.

Amazon Robotics

Robotics Deployment Engineer

February 2021 – May 2022

- Lead onsite engineer for deployment of advanced robotics systems, responsible for installation quality, troubleshooting, and commissioning.
- Deployed five new fulfillment centers on schedule and on budget, enabling rapid same-day delivery expansion.
- Partnered with design/product teams to feed field insights into reliability improvements and deployment playbooks.

Alchemy Industrial

Manufacturing Engineer

November 2020 – February 2021

- Supported bidding new work by researching manufacturing techniques and specifying ways to produce or assemble a variety of products based on intended scale and quantity
- Performed hands-on product teardowns, process analysis, and supplier visits

Speed Shore, Houston, TX

Manufacturing Engineer

April 2019 – August 2020

- Successfully recommended and implemented a robotic welding system, CNC plasma pipe profiler, welding booms, larger bandsaw, new facility layout, moving to bulk-tank welding gas, and moving to drum wire
- Worked daily with operators to improve small items such as: coolant use, CNC cycle times, custom fixtures, welding efficiency, inventory accuracy, and more

Tenaris, Houston, TX

Order Execution Analyst

June 2017 – April 2019

- Managed 6-figures of business on a monthly basis, problem solving to keep orders on-budget and on-time
- Interfaced with my customers daily, translating their requirements to internal production, quality, scheduling, and shipping teams to produce oil casing accessories (Supply Chain)
- Developed and presented weekly and quarterly reports to my customers, keeping them informed of the trends in their business with Tenaris, and seeking continuing efficiencies in our future work

INVOLVEMENT

Austin Youth Conference

Board Member

Since 2016

Boy Scouts of America

Eagle Scout

Since 2008

Learner • Achiever • Competition • Responsibility • Relator