Netanel Ivgi

Industrial Operations & Process Improvement • Industrial Engineering Technician

AI & LLM Implementation

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PROFESSIONAL PROFILE

Industrial Engineering Technician with **over a decade of experience in precision machining** across defense-related, prototyping, and heavy industry environments. Progressed from CNC Operator and Programmer to operational coordination and production execution leadership roles on the shop floor.

This progression provided hands-on insight into real manufacturing constraints bottlenecks, undocumented knowledge dependencies, and schedule pressure which led to **measurable improvements** in production stability. Through the implementation of standardized workflows and structured setup methodologies, **reduced setup time variance by up to 30% in recurring** projects and improved execution consistency under tight delivery requirements.

Today, I integrate Industrial Engineering education **with practical expertise in data and Generative AI** to bridge shop-floor complexity with technology-driven solutions. Through independent applied projects and hands-on learning, I designed and **developed automated reporting tools, AI-based production** analysis models, and workflow digitization frameworks — translating operational needs into structured implementation roadmaps grounded in real manufacturing constraints.

CORE COMPETENCIES

Manufacturing Execution Leadership • Operational Flow & Bottleneck Management • Lean-Oriented Process Improvement • Data-Driven Operational Improvement • Production Process Standardization • Production Process Standardization • AI & Automation Adoption in Industrial Environments •

PROFESSIONAL EXPERIENCE

Independent Applied Projects - AI & Digital Manufacturing Solutions
Applied Projects (Self-Initiated) • 2025 – Present

Operational Optimization • Process Stability • Technology-Enabled Production Support

Design and development of applied **digital solutions** simulating real manufacturing environments, focused on improving process stability, execution consistency, and operational transparency.

• Built a production **reporting simulation** platform demonstrating how structured digital workflows can reduce variability, improve execution visibility, and standardize recurring manufacturing processes.

• Developed a **WhatsApp-based reporting interface** simulating real-time operator input, enabling structured data capture and reducing ambiguity in production status tracking.

Portfolio: netanel-ivgi.com

CNC Programmer & Production Floor Lead

HaAlchimi Precision Machining • 2022–2025

Production Execution Leadership • Process Coordination • Operational Ownership

• Served as the operational decision authority during management absence, responsible for execution prioritization, real-time problem solving, and on-time delivery assurance.

• **Operational ownership of orders** from the moment of release to completion: a sequence of processes, from production process planning - execution - internal quality control - delivery to the customer, which includes dynamically adjusting priorities in response to constraints, load changes and execution risks.

• **Leading a full production cycle** on CNC machines, including programming, set-up, and production, while coordinating daily priorities and **managing work sequences** to protect the production flow, including maintaining tolerances up to ±0.005 mm and preventing rework.

• Optimized CNC programs, setups, and machining strategies to **reduce cycle times** and improve throughput, achieving up to 20% production time reduction in selected projects.

• Provided hands-on technical **guidance and troubleshooting to operators**, reducing stoppages, improving execution consistency, and supporting knowledge transfer on the shop floor.

• **Conducted full in-process** and final quality inspections using precision measurement tools, ensuring tolerance compliance and preventing rework.

Assistant Department Manager - Tool Inventory & CNC Operations

Elkayam Industries • 2020–2022

Hybrid operational position integrating CNC execution, cross-department coordination, and tooling inventory management.

• Served as deputy department manager during absences, ensuring daily **operational continuity and stable production flow**.

• Supported cross-departmental communication and contributed to workplace organization and process improvement initiatives.

• Established and **managed a departmental tool warehouse**, including procurement processes, RFQ handling, and vendor coordination.

• Monitored tool usage, inventory levels, and operational data using Excel and internal systems to improve visibility and reduce unnecessary orders.

• **Coordinated workforce activities** based on immediate production priorities and workload constraints.

• Performed full machine setups and provided ongoing production support across machining stations.

CNC Operator & Setup Technician

HaAlchimi Precision Machining • 2010–2020

Precision Machining • Process Stability • Shop Floor Execution

• Long-term hands-on role focused on precision machining, **process stability, and continuous professional growth** within a high-mix, low-volume production environment.

• Gradually expanded scope of responsibility through sustained practical execution, technical curiosity, and increasing ownership of production quality and outcomes.

• Performed **full machine setups** including fixture alignment, tool changes, work offset configuration, and ensuring repeatable and stable machining processes.

• Interpreted technical drawings, **GD&T, and machining documentation**, translating engineering intent into precise shop-floor execution.

• Conducted in-process and final inspections using calipers, micrometers, and height gauges, ensuring tolerance compliance and defect prevention.

• Worked with a wide range of materials, continuously improving machining precision.

• Identified machining issues in real time and **actively participated in practical continuous improvement efforts**.

EDUCATION

Generative AI & LLM Hands On - Professional Course

Technion – Israel Institute of Technology • 2024–2025

• Hands-on training in Generative Artificial Intelligence and Large Language Model (LLM) applications, including practical implementation projects.

Industrial Engineering Technician (Honors)

ORT Jerusalem College • 2022–2025

• Specialization in Technological Systems.

• Participated in an excellence program focused on management skills, innovation, and entrepreneurship.

• Led a student team in the development of a conceptual venture project.

SKILLS

Data & AI Tools

Python • SQL • Generative AI & LLM Applications • API Integration • Data Analysis & Visualization • MongoDB • GitHub

Project & Operational Systems

MS Project • ERP Systems (Priority) • Manufacturing Planning Coordination • Operational Priority Alignment • Set-up Methodology Structuring • Process Documentation

Industrial & Engineering Systems

CNC Programming (3–5 Axis) • SolidCAM • G-Code • GD&T Interpretation • Technical Troubleshooting • Tooling Inventory Coordination

LANGUAGES

Hebrew – Native

English – Native / Full Professional Proficiency