GUILHERME ITINOSE

MECHANICAL ENGINEER IN TRAINING • CNC, CAM & INDUSTRIAL AUTOMATION

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PROFESSIONAL SUMMARY

Mechanical Engineering student (10th of 10 semesters) with 8+ years of industrial experience, built from the shop floor up: industrial maintenance at São Paulo Metro, CNC lathe programming and operation in serial production at Hantech Brasil, and currently product and manufacturing engineering at Warie Industrial. This progression gives me a practical, end-to-end understanding of how parts are designed, made and validated.

I work across the full development cycle of mechanical components — from concept and 3D modeling in SolidWorks, through CAM programming (PowerMill, Fusion 360, Mastercam), to manufacturing, validation and ISO-compliant documentation. This end-to-end view allows me to design for manufacturability (DFM) and to solve problems at the engineering–production interface, where most delays and rework originate.

My key differentiator is combining traditional mechanical engineering with technology: I develop Python scripts and applications and integrate Artificial Intelligence tools to automate repetitive tasks, build calculation and data-analysis tools, and speed up technical decision-making — skills I also apply as an independent consultant delivering automation projects for external clients.

KEY STRENGTHS

- **End-to-end perspective:** hands-on experience across every stage — maintenance, CNC operation and programming, CAM, product design and process validation.
- **Engineering + Software:** automation of engineering tasks with Python and AI.
- **Shop-floor results:** reduced setup times, improved dimensional stability in critical parts and optimized CNC programs in serial production.
- **Fluent English** (TOEIC 865/990), comfortable with technical documentation, international software and suppliers.
- **Entrepreneurial profile:** independently delivered automation projects for external clients, from requirements gathering to delivery and support.

PROFESSIONAL EXPERIENCE

Engineering Assistant | Warie Industrial **Aug 2022 – Present**

Product and manufacturing engineering for precision prosthetic components — dental and orthopedic prostheses — covering design, manufacturing, validation and continuous improvement.

Product Development

- Design and development of precision prosthetic components (dental and orthopedic prostheses) in SolidWorks, from concept to final validation.
- Creation and technical detailing of 2D drawings in accordance with ISO standards, including dimensional and geometric tolerances.
- Development of assemblies and sets for machine tools.
- Rapid prototyping with 3D printing to validate concepts before final manufacturing, reducing development risk and cost.
- Participation in new product development and improvement of existing designs, with a strong Design for Manufacturing (DFM) focus.

Manufacturing & CNC Programming

- CNC programming for machining centers and CNC lathes.
- Development of CAM strategies in PowerMill, Fusion 360 and Mastercam, including machining simulation and tool-path optimization.
- Monitoring of manufacturing and validation of mechanical components, acting as the technical bridge between engineering and production.
- Optimization of production processes focused on reducing manufacturing time and improving quality.
- Setup and operation of laser engraving machines.

Automation & Digital Transformation

- Development of Python scripts and applications to automate engineering tasks and industrial processes, eliminating repetitive manual work.
- Creation of in-house tools for mechanical calculations, component sizing and data analysis.
- Integration of Artificial Intelligence technologies into engineering workflows to support technical decision-making.
- Management and operation of ERP systems, supporting production planning and control.

Quality & Processes

- Development of Work Instructions and technical process documentation.
- Process validation and risk management.
- Ongoing technical support between engineering and manufacturing in resolving non-conformities.

Industrial Automation & Digital Services Consultant | Downway (own consultancy) **2023 – Present**

Independent technology services consultancy founded in 2023, run in parallel with my main role, with projects delivered for clients across different segments.

- Requirements gathering, technical proposals and full project ownership — from scope definition to delivery and post-delivery support.
- Development of Python automation solutions to eliminate manual tasks and improve productivity in administrative and industrial processes.
- Delivery of tailored digital services with direct client communication and full accountability for results.
- Autonomous management of scope, deadlines and client relationships — hands-on experience with responsibilities typically expected of senior profiles.

CNC Lathe Programmer and Operator | Hantech Brasil Ltda. **Jan 2021 – Aug 2022**

CNC lathe programming and operation in the serial manufacturing of industrial valves, with responsibility for dimensional quality and process efficiency.

- Operation and programming of CNC lathes for industrial valve manufacturing in serial production.
- Reading and interpretation of mechanical drawings and geometric tolerances.
- Tool preparation, machine setup and fine-tuning of CNC programs.
- Dimensional control, part inspection and monitoring of quality and productivity indicators.
- Preventive and corrective maintenance of machining equipment.

Key achievements

- Reduced setup times through process standardization.
- Improved dimensional stability in critical components.
- Increased operational efficiency through CNC program optimization.

Maintenance Apprentice | Metrô-SP (São Paulo Metro) **Feb 2018 – Dec 2019**

- Support in mechanical maintenance of pumps, motors and large-scale industrial systems.
- Participation in preventive and corrective inspections and mechanical fault diagnosis.
- Support in basic electrical maintenance activities.
- Use of CAD tools for technical documentation.
- Training in industrial maintenance and operational safety in a high-criticality environment.

EDUCATION

Bachelor's Degree in Mechanical Engineering Jan 2022 – Dec 2026 (expected)
Universidade de Mogi das Cruzes

Bachelor's Degree in Mechanical Engineering (transfer) Jan 2021 – Dec 2021
Universidade Tecnológica Federal do Paraná – UTFPR

Technical Degree – Maintenance Mechanic Feb 2018 – Dec 2019
SENAI Roberto Simonsen

TECHNICAL SKILLS

- **Engineering & Product Development:** Mechanical Design, 3D Modeling (SolidWorks), Technical Drawing & GD&T, Design for Manufacturing (DFM), Reverse Engineering, Rapid Prototyping, 3D Printing, Technical Documentation, CAD/CAM Integration.

- **Manufacturing & CNC Programming:** CNC Programming (lathes and 3-axis machining centers), CNC Turning, Tool Selection, Machine Setup, Process Optimization, Production Planning, Quality Control, Lean Manufacturing.
- **CAD/CAM & Technical Software:** SolidWorks, Fusion 360, PowerMill, Mastercam, Machining Simulation, Tool-Path Optimization, Engineering Calculations.
- **Automation & Technology:** Python Programming, Process Automation, Engineering Tool Development, Data Analysis, Artificial Intelligence Applications, ERP, Digital Transformation.
- **Management & Soft Skills:** Project Management, Technical Planning, Problem Solving, Continuous Improvement, Technical Communication, Multidisciplinary Collaboration, Stakeholder Management, Data-Driven Decision Making.

LANGUAGES

- Portuguese – Native.
- English – Fluent (TOEIC Certificate 865/990): technical documentation, professional communication and English-language software environments.