Alexis Jedraszyk

alexis.jedraszyk@outlook.com | +1 414 216-3778 | @alexijed.linkedin | Milwaukee, WI, USA

*I'm a hands-on mechanical and industrial engineer with experience across hydraulic, aerospace, automotive, and renewable energy sectors. I focus on mechanical systems design, performance optimization, testing, and integrating advanced technologies, turning complex challenges into measurable results, from developing pumps and motors for the U.S. market to validating reliable systems for hydropower plants. I thrive leading cross-functional projects, improving processes, and delivering high-performance solutions. Currently pursuing an MBA to connect deep technical expertise with strategic impact and long-term growth. **I already hold an approved H-1B visa and only require a standard transfer, ready to start immediately.***

WORK EXPERIENCE

Poclain Hydraulics - North America   **Milwaukee, USA**
***Design, Industrialization and Project Engineer** | Engineering and Project Department*   *May 2024 – Present*
• Led the development and industrialization of hydraulic motors and pumps for U.S. agricultural and construction markets, managing multi-million-dollar international programs and leveraging data analysis to monitor validation metrics, performance KPIs, and on-time delivery for key clients including Bobcat, Caterpillar, and John Deere.
• Coordinated cross-functional technical reviews for axial and radial technologies, using structured validation data, rapid prototyping, and accelerated testing to optimize design iterations and ensure specification compliance.
• Applied QRQC, Poka Yoke and 8D methodologies with data-backed root cause analysis, implementing corrective action tracking that reduced quality issues by 15% and improved product reliability.
• Developed and maintained structured BOMs, 3D models, and technical documentation to ensure traceability, configuration control, and streamlined engineering workflows.

General Electric Vernova, Hydro solutions   **Montréal, Canada**
***Mechanical Engineer** | Special calculation department*   *April 2023 – April 2024*
• Validated turbine and alternator components for new and refurbished hydro plants, using simulation data to ensure reliability;
• Conduct modal analysis to determine natural resonance frequencies, ensuring structural integrity;
• Evaluate welding calculations in static conditions to ensure robustness to operational stresses (CSA W59, AWS D1.1,);
• Perform fatigue analysis in adherence to ASME standards, estimating component lifespan under cyclic loading conditions;
• Prepared technical reports and dashboards to communicate insights and support data-driven decisions for on-site teams.

Stellantis & Latécoère Groups   **Slovakia & France**
Engineering Internships | *Manufacturing (Aerospace) & Continuous Improvement (Automotive)*   *June 2021 – August 2022*
• Contribute transformation ideas during workshops defining product, process, or supply chain improvements of Citroën C3 and new Peugeot 208, including meeting Stellantis external and internal suppliers in Central Europe;
• Facilitate problem-solving solutions in the Monozukuri method team: improving productivity, reducing the TLC: Total Landed Cost of manufactured parts (and batteries) and solving plant performance issues; brought a profit and reached team's objectives;
• Optimized lean manufacturing tool organization with 5S and Kaizen, boosting efficiency by 20%;
• Reduced production time on the aircraft assembly line by 15% through bottleneck elimination.

EDUCATION

Westcliff University : *Master of Business Administration : Applied AI in Business*   **San Francisco, USA**
MBA focused on applied AI and advanced technologies to enhance performance, support data-driven decisions, and drive strategy. Core areas include Managerial Economics, Finance & Accounting, Organizational Leadership, Strategic Management, and Marketing.

Purdue University: *Maha Fluid Power Research Center #1 world research lab in hydraulic systems*   **Indianapolis, USA**
Advanced Engineering Training, Hydraulics System | Fluid Power Technology | Simulation   *October 2024*

Sorbonne University *#2 French engineering university in energy, Shanghai ranking 2022*   **Paris, France**
Master of Engineering in Energy Conversion and Rotating Machinery Systems | GPA: 3.6   *September 2022 – February 2023*
Energy efficiency, Sustainable design, Turbomachinery performance, Mechanical systems optimization.

Arts et Métiers ParisTech   **Paris, France**
Combined Bachelor and Master of Science in mechanical and industrial engineering | GPA: 3.6   *August 2020 – February 2023*
Innovation and Prototyping, Manufacturing, Production, Robotics and Automation, Electrical Engineering, Data Analysis, Systems.

SKILLS AND INTERESTS

***Core competencies & Data management :** Cross-functional team leadership, workflow optimization, KPI tracking and data-driven decision making, problem-solving and troubleshooting (QRQC, 8D), on-site supervision and efficiency improvement, lean process implementation, communication and collaboration across multicultural teams. **Mechanical:** DFMEA, GD&T, FEA, BoM, Tolerance stack-up analysis, PLM (Windchill), Creo Parametric 8.0 (4Cad Certificate; (1500 hours), CatiaV5/V6 and 3Dexperience, SiemensNX, SolidWorks. **Simulation:** Simulink, Abaqus, ANSYS (1200 hours), Star CCM+ (fluid flow simulation software), Simcenter AMESim, Simerics MP+. **Programming:** Python (SciPy, NumPy), SQL, MATLAB, VBA, LaTeX, Mathcad. **Project management:** Orchestra, ERP, Office Package. **Languages:** French (native), English (Professional, TOEIC: 860/990, Duolingo Test : 125/160 CEFR B2), Spanish (Intermediate).*