Mohamed Siblini

✉ msiblini@gmail.com   📞 613-805-0950   in linkedin.com/in/msiblini/   🌐 Ottawa, ON

Results-driven engineer with 7+ years of experience in manufacturing, process development, and technical sales—delivering hardware/software solutions to global enterprises and translating complex concepts into tangible impact.

WORK EXPERIENCE

Tesla   **Jan 2022 – Oct 2024**
Senior Manufacturing Engineer   San Francisco Bay Area, CA

- Deployed high-volume manufacturing lines for battery cell and supercomputer products, applying DFM/DFA and GD&T while forecasting equipment, headcount, and material costs.
- Implemented an AI-based inline vision defect detection, saving $3M by eliminating offline inspection equipment.
- Collaborated with internal teams on change requests, leading PFMEA to reduce defect rate by 61%, accelerating NPI timelines.
- Developed custom fixtures, integrated six-axis robots, and introduced lean automation software, increasing yield by 17%.

Manufacturing Engineer

- Led laser equipment selection and qualification for new 4680 battery cell mass production lines, reducing process cycle time by 32% and doubling machine throughput.
- Spearheaded cross-functional project management for new production lines, overseeing schedules, budgets, and risk mitigation.
- Built factory data pipelines and dashboards in Python, integrating RESTful API's & SQL to deliver critical production insights.
- Created laser welding processes for NPIs using Design of Experiments (DoE), cutting weld time by 66% and raising yield by 15%.

IPG Photonics   **Apr 2017 – Dec 2021**
Senior Applications Engineer   Kingston, ON

- Launched a novel laser welding process monitor, driving $25M+ in enterprise deals across aerospace, automotive, battery storage, and medical devices sectors, boosting product market share.
- Served as the global face of the product, conducting high level demos and technical presentations that closed enterprise contracts.
- Coordinated with international sales teams (Europe & Asia) to gather market insights, deliver technical demos, and refine product marketing strategies, accelerating global expansion.
- Developed and delivered comprehensive product training programs for end-users & internal teams, ensuring widespread adoption.

Applications Engineer

- Enabled new QA process-monitoring solutions for advanced manufacturing, bridging product R&D with unique client challenges and delivering successful proof-of-concept trials.
- Represented IPG at industry events, published white papers, hosted product webinars, to generate leads and build awareness.
- Provided on-site and remote technical support for hardware and software installations, malfunctions, including critical field repairs.
- Leveraged CRM platforms (Salesforce) to manage extended sales cycles and generate accurate revenue forecasts.

EDUCATION

University of Ottawa   Ottawa, ON
Bachelor of Applied Sciences, **Mechanical Engineering**   **Sept 2012 – Dec 2016**
- Minor in Engineering Management and Entrepreneurship

SKILLS & CERTIFICATIONS

- **Skills**: Strong oral/written communication, enterprise sales and deployment, project management, problem-solving, relationship building, white papers, programming (Python, SQL, JavaScript), CAD (SolidWorks, CATIA), Six Sigma/Lean Manufacturing, machine learning (vision AI), manufacturing principles - DFM, GD&T, FMEA, PFMEA, 3D printing.

- **Certifications**
    o Professional Engineer (**P.Eng.**) - Professional Engineers Ontario (PEO), Private Pilot License (**PPL**) – FAA/Transport Canada