



Mohamed Siblini

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 Ottawa, ON

Staff manufacturing engineer (P.Eng.) with 8+ years leading cross-functional NPI, production ramp, and operations for advanced hardware — AI supercomputers, battery cells, and fiber-optic systems — partnering with global R&D and CM teams.

WORK EXPERIENCE

Viavi Solutions

Aug 2025 – Present

Staff Manufacturing Engineer

Ottawa, ON, Canada

- Own end-to-end NPI for high-revenue fiber-optic test and measurement programs (\$100M+), leading cross-functional coordination with R&D, quality, and international CMs to transition designs from prototype through production release.
- Lead failure analysis and CAPA processes with contract manufacturing partners and suppliers to resolve critical build issues.
- Drive process development — custom fixtures, work instructions, and test setups — accelerating production ramps globally.
- Manage product lifecycle from prototype through volume production, tracking yields and driving cost reduction with CMs.

Tesla

Jan 2022 – Oct 2024

Senior Manufacturing Engineer

San Francisco, CA, USA

- Led NPI for the Tesla Dojo AI supercomputer, scaling high-volume production lines and implementing DFM/DFA upgrades to chipsets, GPUs, and liquid-cooling assemblies.
- Engineered robotic handlers and deployed an AI-based inline vision inspection system, saving \$3M by replacing offline QC.
- Headed PFMEA and capacity planning with equipment and material suppliers, mitigating process failures and accelerating timelines.

Manufacturing Engineer

- Conducted vendor selection and ramp of laser welding equipment for 4680 battery-cell production line, cutting cycle time by 32% and doubling machine throughput.
- Developed laser-welding processes using Design of Experiments (DoE), reducing cycle time by 66% and boosting yield 15%.
- Built real-time production data pipelines and dashboards using Python, SQL and Grafana, delivering KPIs for NPI ramps.

IPG Photonics

Apr 2017 – Dec 2021

Senior Applications Engineer

Kingston, ON, Canada

- Spearheaded enterprise adoption of a novel laser welding process monitor across aerospace, automotive, and battery manufacturing, improving client QA and enabling new processes.
- Delivered solutions from complex tech through demos and systems training; applied global insights to product strategy.

Applications Engineer

- Provided on-site and remote technical support for laser system installations and troubleshooting; drove customer adoption through presentations, trade shows, and white papers.

EDUCATION

University of Ottawa

Ottawa, ON

Bachelor of Applied Sciences, **Mechanical Engineering**

Sept 2012 – Dec 2016

SKILLS & CERTIFICATIONS

- **Skills:** NPI, DFM/DFA, PFMEA, GD&T, SPC, Root Cause Analysis, DoE, Laser Welding, Fiber Optics, Optoelectronics, Product Lifecycle Management, CM Management, Yield Optimization, CAPA, Python, SQL, Jira
- **Certifications:**
 - Professional Engineer (**P.Eng.**) - Professional Engineers Ontario (PEO)
 - Private Pilot License (**PPL**) – FAA & Transport Canada