**Aleen Michaelian**

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**OBJECTIVE:** A full-time engineering position in a medical device company.

**EDUCATION**

**MS, Bioengineering,** Santa Clara University, Santa Clara, CA

**BS, Bioengineering (emphasis in medical devices),** Santa Clara University, Santa Clara, CA

**TECHNICAL SKILLS**

**Computer:** NWA SPC system, JMP, SmartCAM, SmartScope, SolidWorks, Matlab

**Manufacturing/ Laboratory:** Laser cutting, Deburring, Shaping, Etching, Electropolishing, Wafer Fabrication (cleanroom), SPC Data Analysis, Microscopy

**PROFESSIONAL EXPERERIENCE**

**Quality Engineer,** TWI Materials (Thomas West, Inc) **CMP Pad Manufacturer** Jul 2017-present

* Was interim manager for 5 months leading quality team and making key product decisions.
* Prepared and presented data/ evidence for customer audits and internal yield meetings.
* Made inspection process improvements based on GRR and Bias studies.
* Developed SOPs for new material testing and process inspections.
* Lead and completed root cause and failure analysis for non-conformances (CARs) using 5 whys and fishbone methods.
* Completed regular Cpk, Sigma Reviews of current product control limits.
* Data analysis of experiment data and production yield.
* Initiated and completed continuous improvement action items to improve product quality based on regular yield reports for multiple product lines.
* Managed QC Analysts and QC lab solving equipment issues.
* Collected data for and generated monthly yield reports reviewing multiple product lines at different stages in manufacturing process.
* Completed PFMEAs for various product lines/ processes.
* Working knowledge of ISO 9001, performed internal audits according to standard.

**Applications Engineer,** Lumenous Device TechnologiesJun 2015-Jul 2017

* Supervisor/Lead Engineer for complete product line of nitinol and stainless steel laser cut devices, working to implement 5s/ lean manufacturing systems and process improvements to increase yield and efficiency.
* Redesigned Af temperature testing machine for CE Mark approval.
* Trained operators to assemble Af Temperature Testing Equipment according to documentation.
* Wrote documentation for CE Mark approval for Af temperature testing machine, including Mechanical Drawings, Electrical Drawings, BOM, CCL, Build/Assembly instructions.
* Planned and scheduled required staffing and production resources to meet weekly priorities for product line, while managing workflow.
* Completed NCRs, CAPA planning, root cause analysis (5 whys), in-process quality assurance, SPC, process capability, and worked with an ERP system.
* Performed validation testing and analysis for stent marker press, pneumatic shaping tool.

**Master’s Thesis (Microfluidic Pump)** Sept 2014-Jun 2015

* Designed and tested electrolysis-based PDMS polymer planar micropump prototype using LabVIEW for flow rate measurements, for integration with microfluidic (Point-of-Care) devices.
* Used rapid prototyping and soft lithography methods to manufacture micropump.
* Performed theoretical analysis to estimate pump performance characteristics.
* Presented posters at µTAS 2014 and BMES 2014 Annual Conferences.