

Lisa Anders

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Engineer with broad knowledge of data manipulation and presentation skills to apply to solving manufacturing challenges. Previous work includes MEMS/semiconductor process integration, new product development, new product ramps, and data infrastructure development. Focused on enabling success through enthusiastic cross-functional collaboration.

Employment History

Illumina

Sr. Product Engineer

San Diego, CA, USA

Feb 2019-Present

- Maintained ETL and visualization infrastructure for Flow Cell consumables manufacturing critical metrics.
- Created data infrastructure for consumables sustaining including:
 - Created automated scripts creating data caches driving SPC charting.
 - Created automated Graft QC disposition image repository, reducing overall team disposition time from hours per day to 15 minutes.
 - Created new Denodo views of Manufacturing Execution System (MES) data.
- Created manufacturing facing dashboard/monitor pages with key performance indicators visible for the manufacturing floor. Project involved collaboration across all manufacturing teams and utilized a scrum methodology for project planning and release tracking.
 - Developed Graft Expiring Flow Cells widget which has resulted in \$17k / quarter scrap avoidance by the manufacturing team.
- CAPA / excursion response team member helping to gather key process data and led causal analysis studies leading to successful resolution of issues on two separate customer impacting events.

Tronics MEMs, A TDK Group Company

BioMEMS Process and Integration Engineer

Addison, TX, USA

Sept 2017-Feb 2019

- Product lead for developing the processes and metrology for manufacturing unique bioMEMS devices.
 - Developed back-end-of-line singulation flow with outsource vendor: flow directly lead to acquisition of a new contract and capability to produce a custom device at low defect levels (>99% yield).
 - Ran DOEs and renegotiated customer specifications on custom product: achieved yield improvement from 43% to 95%.
- Created dashboard reporting using SQL and Microsoft Report Builder for critical product and equipment metrics, including tool up/down time, SPC data, and product CPK.

Texas Instruments: Leadership Development Rotation Program

Aug 2014-Aug 2017

Process Integration Engineer

Dallas, TX, USA

Aug 2016-Aug 2017

- Designed test structures and analyzed electrical data and Wafer Level Reliability (WLR) data to characterize parasitic diode elements on new precision analog technology for automotive applications.
- Executed DOE's at wafer fabrication site with cross-functional team input to understand process constraints on new high precision technology.

Probe Product/Application Engineer

Clark, Philippines

Aug 2015-Aug 2016

- Implemented SQL/Java parametric drift web application as part of team of developers. Applied statistical process controls, six sigma, and WECO statistics, to catch failures before yield impact.
- Led 6 person team for test hardware improvement on high volume wafer probe manufacturing line.

Fab Product Engineer

Dallas, TX

Aug 2014- Aug 2015

- Enabled manufacturing ramp of 5 new devices as part of New Product Introduction (NPI) team.
- Analyzed wafer signatures to improve site-wide yield and reduce sources of failure
 - Found commonality with dead shot signature and worked with photo team to reduce it by 5.6%
 - Found and corrected device-specific test overkill issue with 3% yield improvement

Education

Virginia Tech

Blacksburg, VA

Aug 2014

M.S. Electrical Engineering, Biomedical Emphasis

- Thesis: Lab on a chip rare cell isolation platform with dielectrophoretic smart sample focusing, automated whole cell tracking analysis script, and bioinspired on-chip electroactive polymer micropump

University of Alaska Fairbanks, B.S. Electrical Engineering

Fairbanks, AK

Aug 2012

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Skills

- **Software:** Spotfire, Dataware, Cadence, JMP, Solidworks, Matlab, MES, SQL, Comsol/Matlab, Klayout, CAD, Microsoft SQL Server, R, Denodo
- **Manufacturing Processes:** MEMS, PDMS, soft lithography, cell passaging and handling techniques, failure analysis (SEM, EDX, SAM), photolithography, nanoimprintlithography, wet etch, KOH etching, wafer bond, solvent cleans, plasma ash, RIE and DRIE dry etches, thin films, metallization, metrology, soldering, etc.
- **General:** Microsoft Office, statistics, data analysis, causal analysis, bench testing, ISO 9001, ISO 13485, ITAR