**ARMANDO L. SIGUA JR**

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San Jose, CA

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**SUMMARY**

Extensive experience in maintenance, repair, and installation of manufacturing (lithography, PVD, ALD, CVD, chemical processing) equipment. Major strengths include electro-mechanical troubleshooting, root cause failure analysis and solving complex problems. Special abilities in monitoring the current process and making critical decisions, and extensive experience in Research and Development Environment

Skills include:

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| --- | --- |
| Six Sigma | Lean Manufacturing |
| Control of Hazardous Material | Clean Room Procedures |
| High Vacuum System (PVD, CVD, ALD) | YasKawa Robotics controll/PLC Beckhoff and SMC |
| Software Controlled Processing/Computer programming (coding) | Electrical/Electronic troubleshooting |

**PROFESSIONAL EXPERIENCE**

**Kateeva Newark CA 7/2016 to 9/20/18**

**Sr. System Technician (Manufacturing Equipment)**

* Integrated, built, and tested Lassen 3/Ritters Tioga TFE machines
* Performed defined test procedure (e.g. electrical testing, mechanical testing, and failure testing)
* Experienced in terminating cables, 208 AC volts, and troubleshoot
* Experienced in PLC (Beckhoff technology) programming and ACS SPiiPlusMC4U configuration
* Travelled at least 3x a year to overseas for Equipment Installation

**AMAT (Pilot Test) Santa Clara CA 8/2014 to 5/2016**

**Senior Engineering Technician**

* Integrated, built 30X tools, and troubleshoot newly designed ALD (Atomic Layer Deposition) and Centris (Etcher) 60X tools
* Verified and tested all integrated modules for functionality (e.g. electrical testing, mechanical testing, and failure testing.
* Calibrated RF transmission lines, and boxes
* Written new procedures for troubleshooting
* Extensive experienced in working schematics, diagrams, electronic circuits, gas panel toxic gases
* Experienced in terminating cables, 208/480 AC volts, and troubleshoot
* Experienced in configuring the equipment through Ethernet CAT, and configuring PLC

**San Jose Work2future Computer Science 3/2014- 8/2016**

* Started working on software developer/computer science in engineering via De Anza College Cupertino CA, that focused on coding and implementing of C/C++/Java Advance, and customizes programs to drive operating system

**Intermolecular, Inc. 3011 N 1st Street San Jose CA 95134 2010 to 2/2014**

**Sr. Process Associate/ Supervisor**

* Redefined R&D on Semiconductor through High-Productivity Combinatorial (HPC) technology by 10-100 times faster than the conventional Research and Development(R&D)
* Enabled customers (semiconductor companies) to gain competitive advantage by reducing learning cycle time, cost and risk
* ERT member
* Established advanced semiconductor process (PVD thin film deposition, ALD thin film deposition,), metrology (XRD, XRF, AFM, VASE) and electrical analysis
* Built and integrated Semiconductor equipment(HPC)
* ERT member

**INTEL CORPORATION – Santa Clara, CA 1997 to 2009**

**Equipment/Process Engineering Technician**

* Responsible in repairing and maintaining of semiconductor manufacturing tools such as: sputtering PVD, wet etch (SPC AWS), dry etch (Gasonics), lithography tools (Karl Sus Aligner, SVG) and electroplating tool (EEJA). Performed preventative maintenance (PM) in accordance with established schedules and procedures. Troubleshoot circuit boards and repair all the spare parts.
* Created a new procedure in performing quarterly maintenance on MRC eclipse sputtering machines, in which led to increase tool availability by six days and saved Intel roughly $10,000.
* Saved Intel approximately $100,000+ by troubleshooting a circuit board to the component level with a Huntron Meter
* Increased wafer product output 50% by recommending a team-based scheduling approach that ensured constant coverage in the area, thereby saving Intel approximately $60,000 per year.

**Vishay/Siliconix 1995-1997**

**Equipment/Lithography Process Associate Engineer**

* Maintained and repaired semiconductor equipment (lithography tool set such as: SVG, UTS aligner)

**US Navy 1988-1992**

**Sr. Machinist/Mechanical Mate**

* Maintained and repaired US warship main propulsion engine/auxiliary equipment
* Managed and Led to execute numerous projects such as: gas turbine broke down at sea, and needed to fix in time constraint

## EDUCATION

* Bachelor of Science, Electronics Engineering Technology, DeVry University Pomona, CA
* Advanced RF/Microwave/Wireless, Mission College, Santa Clara CA
* C/C++, Advanced C++, JAVA, De Anza College (OTI), Cupertino CA 2014

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## TOOL CERTIFICATIONS

* IM (Intermolecular) Tempus Plasma Vapor Deposition (PVD)/ Atomic Layer Deposition (ALD) High Productivity Combinatorial
* Metrology equipment such as: XPS, X-ray diffraction, Panalytical XRF/XRD, Woollam M2000 Spectroscopic Ellipsometer
* Allwin Rapid Thermal Anneal (RTP) annealing equipment
* EEJA (electroplating machine)
* Parker Autodoser (automated chemical analysis)
* Agilent HPLC (high performance liquid chromatography)
* SCP Automated Wet System (AWS) that etches metal
* MRC Eclipse (high vacuum system) that sputters metal
* Gasonics Aura 200 Dry Etching
* Endura plasma vapor deposition (PVD), metal sputtering
* Forklift truck operator certified