|  |
| --- |
| Damien Ndzanga  **1134 willow street San Jose CA 95132 · 408-324-6077/740307-8507**  Damien-d@hotmail.com; https://www.linkedin.com/in/damien-ndzanga · |
| **Summary**   * Diversified professional with 16 years of overall experience. * Excellent communication & presentation skills. * Design in Mechanical CAD software (NX, Solid works, Creo, Catia V5/6, AutoCAD, Solid edge) * Create ECN/ECO on Agile/PLM and Enovia/PLM. * Create BOM and input Data in PLM system * Very good understanding of Oracle PLM * Finite Element Analysis and Lab testing of Electro-Mechanical Design * NX Customization and programming. * Team Center PLM and Loading CAD systems on Agile Team Center PLM. * Good Instrumentation and Electrical design and programming of PLCs/ HMI with Mentor * Graphics. Design of piping equipment’s and use of P&ID Diagrams with AutoCAD P&ID Design of Cabling and wire harness using Creo parametric. * Firmware design in c++/python, RTOS (Yotco and Petalinux system to control robots), design of embedded systems and communications (USART, USB, GPIO, I2C, SPI etc for I/O input on processors using STM32, SP32, Arduino, MPLAB IDE), Verilog, Xiling (vivado) ISE, |

# Experience

|  |
| --- |
| Johnson and Johnson 08/2023-05/2024 **Sr Mechatronics and Robotic Engineer**   * Perform design mechanical design on surgical robots using SolidWorks/NX * Program the RTC (Robot Testing Cart) using python and Linux (Ubuntu platform) * Use embedded command to communicate and program between RTC and Robot on Robot node. Perform PCB design using Solid works/Altium PCB and push to 3D solid works mechanical for manufacturing. * Perform sheet metal design for PCB enclosure using NX and solid works Perform robot testing the robot assembly in python 3 script IDE and embedded programming in C++/Java script programming. * Firmware design in c++/python, RTOS (Yotco and Petalinux system to control robots), design of embedded systems and communications (USART, USB, GPIO, I2C, SPI etc for I/O input on processors using STM32, SP32, Arduino, MPLAB IDE)  Lam research / 70% Remote, Fremont CA 08/2021 to 03/2023 **Sr. Sr Mechanical Design/Test Engineer.**   * Perform design test on chip manufacturing machines (process modules) Design and assist in the design of procedure using UG NX 12.0 (1946) * Design and run the Finite element Analysis (stress analysis) using UG NX 12.0 ( * Nastran) Design sheet metal, parts and product using UG NX 12.0 * Design for Assembly (DFM /A) for RF (Radio Frequencies), * Design and test of Vapor chamber system and Etch process in the plasma chamber for Chip manufacturing Design of chip manufacturing instrument using UG NX 12.0 (1946) * Design for test using ultrasonic/Acoustic flow meters, collect data and interpret them in excel and MATLAB. * Use and program ultrasonic system on the DAC system for data collection * Interpret the wavelength in the ultrasonic/acoustic cabling to better focus and collect specific data to better monitor the temperature of the chamber during radicals deposit on the wafer in etch engineering.  ALSTOM (Caltrans) Contract, Vallejo CA 06/2020 to 02/2021 **Sr Mechanical Design Engineer**   * Design of pipping cabin for Caltrans * Sheetmetal design * Design of Sheetmetal panel using SolidWorks Sheetmetal (SolidWorks 2017/2018/2019/2020). * Design of pipping layout and pipping design in SolidWorks * Update the design and assemble in SolidWorks Vault PDM (product development management) Design and update BOM on SolidWorks Vault PDM in large train assemblies Working with Train and railcar electrical panel and cabin frames. * Use of Catia V6 for the design of train frames and electrical wiring. * Coordinate with other design team and share design layout and design updates in Realtime. Create ECO/ ECN for the updates.  CHAWK International Technology, Hayward CA 05/2019 to 03/2020 **Sr. Manufacturing Engineer**   * Drive the manufacturing process for existing projects Create ECO and ECN for new parts and new jobs * Create Work instructions (WI), Operational Method Sheet (OMS) for DFM and DFA. 5S, Ck, Cpk, 5Whys, Weibull Curve, Keizer, PFMEA, FMECA. * Train the manufacturing technicians in the OMS and WI and submit to manufacturing. Help in DFx for new projects. Mold designs and simulations using SolidWorks * Design of draft angles, partin lines and ejection pins and Molds analysis. Factory Design and layout using Factory design suite 2018 and Inventor Expert in the use of SolidWorks for the design of parts. * Good knowledge and understanding of plastics manufacturing. Design vacuum chamber for the healthcare industry * Experience designing Mold for molding and thermoforming. * Perform FEA on new projects design Mold design and DFM with SolidWorks and UG NX 11.0 Design parts using UG NX 11.0 and SolidWorks 2019 SP5. * Design the parts using SolidWorks 2018/2019 and UG NX 11.0 as per customer specification * Design fixtures for FEA and testing equipment’s using SolidWorks 2019 * Design for manufacturing (DFM) and Design for Assembly (DFA) Design for * Cost and New product Introduction * Process Failure Mode Effect Analysis, Design Failure Mode Effect Analysis.    KLA-Tencor/HCL, Milpitas CA 05/2018 to 04/2019 **Sr. Electro-Mechanical Design Engineer.**   * Mange Project from start to end * Design of optical cables and optical cable harness. * Design of optical sensors and opto-mechanics related devises for communication with HMI devices * . Design of Cabling and Wire harness with AutoCAD 2016/2019 * Create ECN/ECO on ENOVIA / PLM * Teamcenter Data Modeling, Business Modeler IDE (BMIDE) Load and manage Electrical design in EPDM system. * Create BOM and Input Data on EDOC * Design of Electrical schematics for DATA canters servers. * Design using AutoCAD and inventor for the power cables on * GD&T Analysis and stack up * Design wire harness for Servers and interconnect diagrams connection Design and layout TARGA / SKYLINE Servers with Visio professional * Project engineer for the Targa, Data centre storage. * Design Wire Harness and Release the design for Manufacturing Design of optical cables and optical cable harness. * Review design and update it to reduce EMI/EMC between electrical cables and ECOM * cables Order the part and update the inventory in Enovia PLM Build the Unit and test the unit in the lab. * Design of optical and acoustic system using Zemax and Code V for the design and update design for focal length in optical cable and transponder communications. * Design of acoustic system in sound reduction and wave interference EMI/EMC cabling in communication wire harness.  Vertiv/Persistent, Columbus OH 07/2017 to 12/2017 **Sr. Electro-Mechanical / Mechatronics Design Engineer.**   * Design of Electro-mechanical system in the HVAC industry * Design of optical sensors and opto-mechanics related devises to read heat exchange. Team center Architect, Engineering Change Notification in PLM centers Agile. * Teamcenter Data Modeling, Business Modeler IDE (BMIDE) * Design of factory layout and Design for Manufacturing using Automation Studio (InterSpec). CAD design in TC architect and update of BOM in Agile TC and PLM. * Design of Wire harness and pipping system for Data storage and Health care facilities. Design vacuum equipment in the HVAC and dehumidifier domain. * Design of optical sensors and opto-mechanics related devises to read heat exchange. Design of * Cabling and wire harness using Solid Edge ST8 and UG NX * Design of Electrical Harness for Cooling systems using Solid Edge ST8 and UG NX Help in the design of Chill water pipping system for Health care facilities * Update design of Chill water, Dry Systems (DS) and Data Storage Equipment (DSE) Manage the Team Center, Agile to match the improved designs. * Address the Standard Features Authorization (SFA) for specific client requirements. Design the * Wire Harness for SFA using Solid edge ST8 and UG NX * Design the pipping for the cooling system with the ECN (Engineer Change Notification) address.    Travis Body and Trailers, Houston TX 09 2015 to 06/2017 **Industrial / Reliability Engineer**   * Design Lock for truck doors body lock with Catia V5 * Design body lock mechanism for trucks and trailers using Catia V5 Draft weld med for the doors and assist in the installation. * Schedule maintenance activities for welding machines * Design of factory layout and Design for Manufacturing using Automation Studio (InterSpec). * Design Failure Mode Effect Analysis (DFMEA) and Desing For Manufacturing, (DFM) * Draft the reliability matrix to maintain the machinery * Design for Reliability (DFR) * Fallow the machine trend after fault to calculate Mean Time to Return (MTTR) * Follow the machinery to Catch the MTBF * Maintain the MRO (Maintenance Repair and Overhaul) on the welding machines. * Install new machines * Repair the brake press, the shear and the drill press. * Use Fish Bone Diagram to diagnose and the Weibull curve to analyse the machines downtime. * Fallow machinery for continuous improvement using CMMS   OTHER EXPERIENCE Electrical / Automation Engineer (Commission and Validation)Automation Plus, Houston TX 06/2015 to 09/215Manufacturing/NC EngineerLincoln Mfg., Magnolia TX 09 2014 to 06 2015Manufacturing/NC EngineerWIKA, Lawrenceville GA 01 2013 to 03 2014Manufacturing/NC EngineerTNN Manufacturing Inc, Houston TX October 2011 to April 2012Mechanical Design EngineerRehig Pacific, Lawrenceville GA Sept 2010 to June 2011Mechanical EngineerCyber Vision Inc, Duluth GA July 2010 to Sept 2010Design and Validation EngineerPoly Air, Atlanta GA Jan 2010 to July 2010COMPLETION ENGINEERSchlumberger Oil and Gas Company, off the coast of West Africa and Houston TXIndustrial / Reliability Desk EngineerEquatorial Heat and Ventilation, Douala Cameroon |
|  |

# Education

|  |
| --- |
| BSc In INDUSTRIAL ENGINEERING   * MAJOR: BSc INDUSTRIAL MANUFACTURING /MECHANICAL ENGINEERING * MINOR: AUTOMATION / MECHATRONICS ENGINEERING   School: University Institute of Technology Douala, CMR  09/1999 to 10/2002 |
|  |

# Skills

|  |  |
| --- | --- |
| **Soft Skills**   * Fast Learner, Good listener and can take instruction written and verbally. * Masters Microsoft Environment (Word, Excel, Access, Power point) * Good Presentation skills with MS power point Can manage a project from beginning till the end. Teamcenter Data Modeling, Business Modeler IDE (BMIDE) NX Customization and programming. * Team Center PLM and Loading CAD systems * Prepare project report and submit ticket to the client at the end of the project. Experience in dealing with clients of all sort. * Good Communication skills * Can work in a team, and self-starter * Can work under pressure to meet deadlines   **Design Skills**   * Use of CAD tools to draft and design * Research and Development R&D Design, Development and Validation. * Injection molding design(Draft angles, ejection pins) * New Product Introduction * SolidWorks, Pro-E and Catia V5 to design Mechanical parts * Use CAD/CAM( Solidworks CAM,UGNX CAM) MasterCAM,EspritCAM , SurfCAM, software to write NC programs for CNC machines Design and write PLC program with Ladder Logix RS5000 series   **Project Management Skills**   * Microsoft Project management Gantt Chart * Agile PLM system with CAD * Enovia PLM system with CAD * Epicor PLM CAD/CAM * Vault PLM with CAD * Oracle PLM CAD /CAM * Create ECO / ECN and manufacturing documentations | **Manufacturing Skills**   * Set-up and route the NC programs to the CNC machine centers Set- up mills and lathe and run high speed CNC machines Edit the program editing federate, speed at the machine screen. GMP, Lean Manufacturing, Six sigma terminology * 5S, Ck, Cpk, 5Whys, Weibull Curve, Keizer, PFMEA, FMECA. Function test and pressure test to simulate manufactured parts Run load test and stress test. * Operate CNC machines (CNC Lathe and CNC Mills).   **Simulation and Validation Skills**   * Run Finite Element Analysis (FEA) on software (Ansys and Nastran) * Pro-E similux, SolidWorks Cosmos, Mentor graphics for wire Harness SQL and VB tools for customization of NX * Flothermal, CFD, Stress Analysis, Vibration Analysis. * Simulation of CNC programs using Vericut * Simulation of PLC programs with Automation studio * Oscilloscope, Multi meter, Ohmeter, Voltmeter , Ampere meter . * List one of your strengths * List one of your strengths |

# Activities

Reading Engineering magazines, Doing Engineering designs as hobby (C++ and Firmware programming, ISE Verilog and Xilin (vivado) CAD (Solidworks and NX design).

Research the internet for new innovation and engineering articles.