Eric DeLaRosa | Curriculum Vitae

PO BOX 6523,Bakersfield, CA, 93386

 (661) 865–7881 •   (661) 381–1191 •   edelarosa3@csub.edu
 www.linkedin.com/in/eric-delarosa-691038127

Most currently, I performed as a Software Integration Engineer for MNC Software Inc, who specialize in monitoring and control software. Previously I was an a Development Electrical Engineer for B&A Engineering Systems who is a primary go-to small business for NASA's Jet Propulsion Laboratory (JPL). My professional engineering experience is primarily in Software Integration, aerospace electrical design, and testing: maintaining ISO 9001, OSHA standards.

Additional skills include Software Integration, Creating Custom Drivers and GUI's, Flight/Aerospace Testing, Electrical Schematic and Assembly Capture, Circuit/Microcircuit System Design & Troubleshooting, research, Critical Thinking, VHDL, MATLAB, MultiSim, LABVIEW, Arduino, Python, Sketch up, AutoCAD, LaTex, Assembly, C/C++, python, Quartus, Unix, Office, Oscilloscope, 3D modeling, 3D Printing/Prototyping. NASA ESD, JCI, Clean-room Certified, and hold a Secret Security Clearance.

Pre-undergraduate experiences include: 10+ years of Construction and Project Management experience as well as 7+ years work and Management experience. Results-Orientated, Motivated Professional with over 5 years' experience in Sales, Marketing, Negotiating, Objection Handling, and customer service. Daily Office Management including Office Operations, Staff training, sales Staff Training, and Implementation of Office Procedures for excellent Customer Service and product flow to increase sales with new customers and to build current customer base.

Employment

MNC Software Inc.	**San Diego, CA**
Software Integration Engineer	*Jan 2019 – Nov 2020*

Integrated our Monitoring and Control Software across multiple service providers antenna stations to monitor and control ground based station devices: Up-link and Down-link chain devices Devices.
SKILLS USED: Groovy, Java, Json, XML, C/C++, SQL/Mysql,BASH/Linux/Unix, VPN, SSH , TCP , SNMP, Serial , Socket , Jasper reports, SVN , Networking.

Duties:
- Broad Range of Duties: Software Testing, Installation, and Troubleshooting.
- Creating Features for Core software.
- Creating SQL/Mysql Reports.
- Install monitoring and control software to Control and Monitor 1-N Devices
- Troubleshoot issues with drivers, and establishing connection to devices.
- Understand Different Communication protocols for remote communication.
- Create Automation Scripts according to Customers needs.
- Create GUI's according to Customers needs.
- Create Drivers for Devices.
- Create Decommutation scripts for devices.
- Create Commanding Scripts for devices.
- Create Virtual Devices Based of Parameters from other devices and according to Customers needs.
- Onsite and Remote installation, testing, and troubleshooting of devices.
- Excellent Troubleshooting and Overcoming objections/obstacles skills and problem-solving skills.

B&A Engineering Systems   **Costa Mesa, CA**
Electrical Engineer   *Oct 2017 – Jan 2019*

Development Electrical Engineer with experience in aerospace design, as well as environmental testing, and ISO 9000 & ISO 9001 competent. Additional skills include Flight and Environmental Testing, Circuit/Microcircuit System Design & Troubleshooting, Research, Critical Thinking, Test-bed Setup and Integration, EGSE Design. ITAR sensitive Projects.

SKILLS USED: LABVIEW, Arduino, Python, Sketch up, AutoCAD, LaTex, Assembly, C/C++, Python, Quartus, Unix, Office, Oscilloscope, 3D modeling, Prototyping, FMEA.
SKILLS GAINED: NASA ESD, JCI, and Clean-room Certified.

Duties:
- Broad Range of Duties: Testing, Design, to Troubleshooting.
- Design, and create Isolation Chassis based on customers specifications or requirements for testing.
- Flight quality design, testing , and Troubleshooting.
- FMEA (Failure Mode Error Analysis) reports.
- Install test article
- Assemble electro-mechanical assemblies and test equipment wire
- Set up, calibrate, and fabricate test components and carry out laboratory, assembly and vehicle testing.
- Collect test data and report results to designated managers and engineers.
- Assist in the design and fabrication of special test fixtures and test
- Operation of test equipment/software. (Labview, Control Systems, environmental chambers, vibration tables, and altitude chambers)
- Knowledge of shop floor quality testing techniques and inspection. (Visual, Tap, IR, Etc)
- Schematics, engineering drawings, circuit layouts, parts lists/BOM
- Assembly Drawings, GERBER Files, circuit layouts, parts lists/BOM
- Cable harnesses: Wire diagrams, layout drawings, and parts lists
- Mechanical assemblies: Mechanical drawings and parts lists
- Performing electronic testing and inspection using portable measuring devices.
- Computer software proficiency, including laboratory or industrial applications, and technical writing skills.
- Excellent interpersonal and verbal communication skills, and able to maintain good will in a potentially adversarial role.
- Through understanding of electronics, test equipment, mechanical test methods and electro mechanical testing.
- Excellent organizational skills and problem-solving skills.
- Strong team player.

California State University of Bakersfield   **Bakersfield, CA**
Electrical Engineering - Intern   *Summer 2017*

As result of a project of my own, a 3D Infrared scanner, I was asked to take on a project researching thermistor technology: specifically to develop a prototype for crop management that can, in real time, take the analog temperature readings of agriculture and produce crops with respect to mass production, economic cost and energy efficacy.

Education

Academic Qualifications..

California State University of Bakersfield   **Bakersfield, CA**
Electrical Engineering , Minor in Ethics, Cal OSHA Certified, High Speed Rail Certified   *2014 – 2017*

Taft College   **Taft, CA**
Physical Science, A.S. for Transfer   *2011 – 2013*

o **Foothill High School**   **Bakersfield, CA**
  H.S Diploma, CDE -Computer Design and Engineering, 6x All-American – Wresting   *2003 –2007*

Notable Professional Projects..

o **MARS 2020 Helicopter "Ingenuity"** *'EGSE for the MARS 2020 Helicopter.'*
  Contracted to Create a Electrical Ground Support Equipment (EGSE) for the MARS 2020 Helicopter at
  NASA's Jet Propulsion Laboratory (JPL) in Pasadena, CA.
  - Over Voltage/Over Current Protection and RS-422/Multi-Signal Isolation Chassis for Helicopter
  - Custom Cable Harness.
  - Schematic Capture
  - Develop Test Procedure

o **EUROPA CLIPPER** *'Team member of the Power and Sensors Division for Project.'*
  Contracted preform Multiple duties for the EUROPA Clipper project at NASA's Jet Propulsion Laboratory
  (JPL) in Pasadena, CA.
  - Test-bed Integration.
  - Test-bed Failure Mode Error Analysis (FMEA).
  - Parts Procurement.
  - Develop Test Procedures

o **MARS 2020 Rover "Perseverance"** *'Testing Multiple Electrical Control Modules for the MARS 2020
  Rover.'*
  Contracted preform Environmental Testing on Control Modules to withstand the forces of Launch, Cruise,
  and Decent Modules for the MARS 2020 Rover at NASA's Jet Propulsion Laboratory (JPL) in Pasadena,
  CA.
  - Carry out Test Procedure for multiple Environmental Testing techniques.

Notable Personal Projects..

o **3D Infrared Temperature Scanner:** *'3D temperature point cloud with temperature signature mapping
  at each sampled point. '*
  Individual project assignment from my Digital Communications Class where I developed a device that uses
  the principals of spectroscopy, Proximity (location) of an object/area, and its relative temperature in the
  infrared spectrum to create a 3D point cloud of Object with a temperature signature overlay.

o **Web Sever Controlled Tri-Tank:** *'Data Acquisition and Instrumentation Control.'*
  Use the concepts provided from my Data Acquisition and Instrumentation Control class to create a tri-
  tank that is controlled from a web server, via any web browser connected to the same sever. 80% of the
  tri-tank was 3d printed. Additionally, the tri-tank is also equipped with object sensing and avoidance.

  All supporting media for projects is available on Linkdin.com and Youtube.com

Technical and Personal skills

o **Programming Languages:** Java, Groovy, VHDL, LabView, Python, C/C++, SQL/Mysql, Bash, Matlab,
  Arduino, and LaTeX.

o **Industry Skills:** Embedded Systems (Advanced), Electrical/Software Testing and Integration (Advanced),
  Matlab (Advanced), C/C++ (Advanced), Most MS Office products (Advanced) Oscilloscope (Advanced)
  3d Modeling software: OrCad/Cadence , Altium , Multisim, Sketch Up, AutoCAD, LaTeX, Unix, Quartus,
  Fritzing, Cura ,

o **General Business Skills:** Good presentation skills, Critical Thinking, and Works well in a team.

o **Other:** Soldering/Spot-Welding and other Prototyping skills: PCB design and fabrication, Circuit analysis,

analog circuits, digital circuits, cable and harness design, Can write well organized and structured reports.

Interests and extra-curricular activity

o Even when I am not endeavoring in school or work activities, I still can not break away completely from my passion: I have personal research and projects that attract my attention. In addition to my projects that I have completed for school and work, I have also completely constructed two 3D printers on my own from which I have used to design and produce countless items from to two drones to the casings and about 90% of my project material for my projects. Lastly, some other devices that I am currently prototyping: a cellphone locating device for the Kern County Department of Corrections; and As an intern for California State University of Bakersfield, developing a prototype for crop management that can, in real time, take the analog temperature readings of agriculture and produce crops with respect to mass production, economic cost and energy efficacy.

o Participated in the Career Day Expo by the CSUB SWE club, where I presented and demonstrated my 3D Infrared Scanning project to teachers, other facility, and potential employers from local industries. From this I was asked to intern for the university developing a project for the the local agricultural industry.

o In addition to my Achievements, Projects, Skills, and Education, I am a proud father of two girls and one boy. I love spending time with my family, and cherish every bit that I can get with them between work and school. I constantly strive to work hard and manifest success in my life, not only to provide for my family, but because I have always been inclined to this path from a young age: as a boy I told myself that I would be an engineer when I grew up.

References

o References available on request