JEFFREY CHARLES LAMBERT

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RADIO FREQUENCY (RF) TEST ENGINEER

Detail oriented, analytical hardware test engineer with a strong background in LabVIEW and RF. I am solutions oriented, goal driven, and I constantly seek out new ways to continuously improve both myself and my work. I learn while on my feet, and I work well in both individual and team settings. I am flexible and adaptable to your needs – let me know how I can help you!

SKILLS

- **Core skills:** LabVIEW, TestStand, RF measurement and communication, research and development (R&D) in manufacturing processes and product development.
- **LabVIEW skills:** NI DAQ, CompactDAQ (cDAQ), DAQmx, PXI, FlexRIO.
- **General applications:** Word, Excel, Outlook, PowerPoint, OpenOffice/LibreOffice, Google Suite.
- **Domains:** Commercial and industrial test equipment, automotive and defense, research and development, manufacturing.

PROFESSIONAL EXPERIENCE

LabVIEW Engineer October 2023 – Present

Cyient, Pittsburgh, PA

I work full-time for Cyient and I am an on-site contractor for Hitachi. As such, I am responsible for:

- Communication between Hitachi and Cyient: I ensure development flows smoothly and I provide Cyient with information that is requested so development and project management can occur efficiently and quickly.
- I am a developer for Hitachi and I provide development services for various backplane modules for the San Francisco Bay Area Regional Transit (BART) automated train control and signaling system.
- I am studying to retake the Certified LabVIEW Architect (CLA) exam in April or May.

Software Engineer May 2022 – April 2023

Astronics Test Systems, Orlando, FL

Support of Astronics AutoTune, an automated test suite built into Astronics Test Systems/Freedom Communications Technologies R8000 communications analyzer, to automate the process of radio transceiver alignment and calibration in field applications.

- Enhanced support for the Motorola SL300 and BK Realm KNG-P800 series radios for the R8000 AutoTune test suite.
- Updated and tested the CTS3100/TS-4549T LabVIEW API to support new software and hardware driver libraries.
- Passed Certified LabVIEW Developer exam without retraining.

Senior Test Engineer October 2018 – March 2019

BCS Automotive Interface Solutions, Auburn, NY

Sustaining of a low mix, high volume robotic production tester to improve first pass yield (FPY) of a wireless receiver for automotive application by 5-10% and brought tester from 1-2 test chambers of operation to 3/4 consistently.

- Aided in retesting scrapped tire pressure sensors and saved BCS AIS over $700,000 in material cost.
- Improved automated LabVIEW and TestStand test code by reviewing test algorithms and ensuring proper operation of tests and communication with DUTs, making the test code more reliable and faster, lowering test time per DUT.
- Miscellaneous training such as arc flash training and lock out/tag out (LOTO) for support of high voltage power to test stations.

Senior Systems Integration/Test Engineer August 2017 – December 2017

Lockheed Martin, Orlando, FL

Responsible for the upgrade and maintenance of the Javelin manufacturing test station and modernization of the station and its associated test code and equipment.

- Refactored HTBasic test code to modern TestStand sequences with LabVIEW test code on the backend.
- LVOOP (LabVIEW Object Oriented Programming) for hardware drivers and communications APIs.

Senior Test Development Engineer July 2015 – January 2016

Jabil Circuit, St. Petersburg, FL

Responsible for design of cable harnesses, selection of test equipment, and design of test stations for product test on the manufacturing floor of Jabil's St. Petersburg manufacturing facility.

- Implemented a JTAG boundary scan procedure for a high voltage power supply controller board.
- Selected rack and stack test equipment for an automated test station to support a high voltage power supply in a bed of nails, pneumatic test fixture.

Staff Test Engineer January 2012 – June 2015

National Instruments, Austin, TX

Engineer in the NI RF Test Engineering group supporting new product introduction (NPI) of RF test and measurement equipment and systems. Responsible for functional verification test (FVT) and intermediate functional test (IFT) of completed products as well as PCB assemblies at the Austin, TX manufacturing facility.

- Developed the Medusa test solution, a custom approach to making scalar s-parameter measurements from a bridge coupler, signal generator and spectrum analyzer, and integrated it into one of National Instrument's existing RF test stations.
- Debugged an automatic VNA calibration standard that was causing an offset with S_{21} and S_{12} measurements, resulting in test failures of the NI-MCT (Mobile Communications Tester).

Electrical Engineer/Research Assistant April 2008 – December 2011

University of Central Florida, Orlando, FL

Research assistant to Dr. William Crampton in the UCF Biology department where I debugged, redesigned, and developed hardware and LabVIEW applications for research of South American electric knifefishes.

- Designed and developed the EOD Machine, hardware which integrates with LabVIEW software for the automated recording of South American electric knife fishes' electric organ discharges (EODs) using electrodes, an ordinary fish tank and a net.
- Designed and developed SARD (Summing and rectification device), which integrates with LabVIEW software for logging the EOD pulse rate of electric fishes.
- Re-architected and re-wrote EFSAP (Electric Fish Signal Acquisition Platform) a customized, data acquisition system for the calibration of and storage of electric organ discharge (EOD) signals from live electric fish for use in field and laboratory applications.

AWARDS

- National Instruments: "Rookie of the Year", 2013. Selected in a group of 5 people out of a team of 70.

EDUCATION & CERTIFICATIONS

M.S., Electrical Engineering (MSEE)

University of Central Florida, Orlando, FL

GPA: 3.6, RF and communications concentration, thesis track

B.S., Electrical Engineering (BSEE)

University of Central Florida, Orlando, FL

- Certified LabVIEW Developer (CLD) April 2023

ACTIVITIES

- Licensed Amateur Radio Operator: K1VZX (Extra class).
- IEEE Instrumentation and Measurement Society Vice Program Chair, 2014.

ADDITIONAL TECHNICAL SKILLS

- **Test equipment:** Programmable vector network analyzers (VNA), oscilloscopes, spectrum analyzers, communications analyzers, vector signal transceivers (VST), signal generators, waveform generators, power meters, software defined radio (SDR), superheterodyne.
- **Communications/embedded:** GPIB and RS232 control, Atmel and ST microcontrollers, SPI/I^2C.
- **Operating systems:** Windows (9x, XP, Vista, 7, 10, 11), MacOS (including classic), Linux (Ubuntu, Debian), UNIX (*BSD).