eric savage

Philadelphia, PA - Email me on Indeed: indeed.com/r/eric-savage/568532ccb2a8316a

Authorized to work in the US for any employer

WORK EXPERIENCE

Senior Electronics Engineer

Lockheed Martin Space Systems Company - Newtown, PA - March 2011 to May 2015

Responsibilities

Participated on an engineering design team in Electrical Power Subsystems (EPS) for Space Systems Company working through all phases of the design from requirements development through qualification and flight production. Responsibilities included performing circuit design, PCB layout, worst case analysis (WCA), piece part failure mode effects and criticality analysis (FMECA), part stress analysis (PSA), failure analysis (FA), maintaining and defining requirements in DOORS, defining test requirements, creating test procedures, troubleshooting flight hardware / special test equipment, reviewing flight test data and presenting at failure review board (FRB) meetings. Worked closely with engineers in other disciplines (mechanical, thermal, dynamic, system and test) to find creative solutions to technical problems while also involving them early on during the design phase to avoid future problems and schedule delays. Additionally, I served as a technical lead on the development of a critical box level component in the Lithium Ion subsystem with a focus on common products for use on all programs. In this role, I reviewed circuit designs and analyses performed by other engineers on the team while providing guidance to lesser experienced engineers.

Engineer

Frequency Electronics Inc - Mitchel Field, NY - December 2006 to April 2010

Responsibilities

Participated on an engineering team responsible for designing and producing low noise, space level RF Synthesizers and Local Oscillators ranging from 1MHz to 20GHz, working from the design phase through qualification and flight production. Responsibilities included supervising technicians and associate engineers performing alignment, test and troubleshooting at board and box level, creating and performing alignment / test procedures at the board and box level, performing data review of flight hardware, troubleshooting board / box level failures and performing component stress analysis due to failures. Additionally, served as subject matter expert (SME) on worst case analysis (WCA), performing WCA on circuit designs by higher level engineers through circuit analysis and simulations, verifying simulation models with hardware, providing circuit design updates to meet requirements at end of life (EOL) worst case and presenting results to the customer.

Associate Engineer

V-COMM L.L.C. - Blue Bell, PA - October 2005 to September 2006

Responsibilities

Participated on an engineering team responsible for performing optimization of cellular networks through audits and redesign. Responsibilities included constructing existing network via invoices and company provided data, researching Telecom tariffs and standards for pricing and penalties incurred for terminating service, contacting Telecom carriers and optimizing the network through identifying new hub locations based on current subscribers and projected growth.

Associate Electrical Engineer

Princeton Plasma Physics Laboratory - Princeton, NJ - March 2004 to September 2004

Responsibilities
Participated on an engineering team responsible for the testing and maintenance of critical research equipment. Projects worked on included Avalanche Photo Diode (APD) Amplifier, Camera Controller Redesign and Ground Fault Monitor Research. Responsibilities included performing board level troubleshooting, creating and performing test procedures, collecting data, generating user manuals and test reports, creating block diagrams from legacy schematics and creating / running simulations using OrCAD.

Engineering Assistant

Poly-Scientific - Springfield, PA - March 2003 to September 2003

Responsibilities
Participated on an engineering team responsible for the design and testing of actuators used in aircraft. Responsibilities included performing acceptance test procedures to verify accurate performance under normal conditions as well as under temperature and gravitational force stress conditions. Additional responsibilities included breadboarding / troubleshooting of prototype and test circuit boards and verifying circuit board layouts with schematic before being sent for mass production.

EDUCATION

BS in Electrical Engineering (RF and Electronics)

Drexel University - Philadelphia, PA
2000 to 2005

SKILLS

Software Programs: ICAP, SABER, OrCAD Pspice, Ansoft, ADS, DOORs, Mathcad,EPDM,Microsoft Word,Visio,Excel,Power Point, Test Equipment: Network Analyzer, Spectrum Analyzer, Frequency / Function Generator, Oscilloscope, Logic Analyzer, Agilent 5052 Phase Noise Analyzer, Frequency Counter, Power Meter

AWARDS

Robert Quinn Outstanding ECE Undergraduate

June 2005
Awarded for outstanding academic excellence, graduating Summa Cum Laude with GPA of 3.9 on 4.0 scale.

ADDITIONAL INFORMATION

Relevant Coursework

Senior Design Project
Participated on an engineering team designing a RFID Reader for the 2.45GHz Band. Goals of the design were to minimize the Noise Figure and maximize the detectable distance of the Reader while operating under FCC regulations. Responsibilities included: researching available components (PA, Mixers, LNA, Local Oscillator, etc), designing each component's surrounding circuitry through calculations, Smith Chart and simulation in Agilent ADS, designing board layout in ADS and testing design with automatic network analyzer, spectrum analyzer and function generator to verify performance. Other activities included scheduling, cost analysis, researching alternative solutions, and presenting results.

RF Electronics I and II

Laboratory concentrated coursework including the design, testing and tuning of couplers, power dividers, impedance matching networks, filters, switches, phase shifters and amplifiers. Designs were made using theoretical calculations and Smith Chart, tuned using Agilent ADS, fabricated through microstrip line and tested using Automatic Network Analyzer, Function Generator, and Spectrum Analyzer.

Advanced Electronics I & II
Application, design, simulation and testing focused courses, involving op-amp principles, feedback techniques, transfer function implementation, active filters, RF amplifiers, oscillators and am/fm modulation.

Digital Electronics
Design, simulation and characterization of digital building blocks (inverters, nand, nor), CMOS logic gates, drivers and memory.

EE Labs I, II, III & IV
Laboratory intensive courses involving design, simulation and testing of analog and digital circuits in the electrical engineering areas of computers, controls / robotics, electronics, power and energy, and telecommunications. Lab IV involved semester long design of a digital voice recorder.