

Contact

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Top Skills

Innovation Management
Engineering Management
Electronic Engineering

Certifications

Licensed Professional Engineer

Publications

IEEE 1451: A Universal Standard for Sensors

Using IEEE 1451 to Reduce Life Cycle Costs in Industrial Automation

Divine Bal

Embedded electronics hardware and systems engineer
Austria

Summary

Embedded electronics designer with experience in designing low cost, low power systems from initial concept through final prototype. Proven leadership and management experience in technical environments. Focus on modular and embedded wireless sensor networks.

Specialties: ZigBee networks, electronic design, PCB layout, wireless networks, electronic component ordering, embedded electronics design, modular systems design, systems architecture, systems engineering

Experience

epitome GmbH
Electrical Design Engineer
December 2023 - Present (2 months)
Austria

Eaton
Lead Electronics Hardware Engineer
February 2022 - February 2023 (1 year 1 month)
Vienna, Austria

Designed solid-state and hybrid circuit breaker for low-voltage (<1000V) DC grid applications. Defined system level requirements for circuit breaker systems. Collaborated with international research groups to ensure product meets emerging standardization efforts. Led efforts to incorporate requirements and product lifecycle management tools within project team.

Next Generation Concepts and Technologies, LLC
President
November 2015 - May 2021 (5 years 7 months)
Greater Chicago Area

Provided customers with systems engineering and product management across multiple projects. Developed requirement specifications, project plans,

technical reports, and work breakdown structures. Reviewed designs and analyzed customer developed protocols. Participated in multiple international standards development projects

TAMARACK BD Enterprises

Director of Innovation

October 2015 - June 2017 (1 year 9 months)

Managed complex projects and applied systems engineering practices to develop full requirements and work breakdown structures to ensure accurate cost analysis.

Responsible for technical reports at all stages of projects and all system level technical drawings.

Oversaw electrical schematic and bill of material creation and completed all mechanical drawings and 3D models of systems.

Parker Hannifin domnick hunter / SciLog

Analog Design Engineer

May 2013 - July 2015 (2 years 3 months)

Project management of sophisticated and complex projects ranging from data validation to process improvement to NPI to redesign efforts including scope definition, defining requirements, planning timelines, leading cadence meetings, budget projections, cash flow analysis, and leading multidisciplinary teams.

Design of electronic system architectures, modular electronic systems, embedded sensor systems, and high-speed design.

Mandli Communications

Embedded Systems Engineer

August 2012 - May 2013 (10 months)

MTSI

2 years 6 months

Digital Design Engineer

July 2011 - August 2012 (1 year 2 months)

Installation and configuration of various simulation and development tools (NeXt-Midas, Questa, Subversion, Active-HDL, Riviera-PRO)

Verilog code design work and testbench development

Wrote several proposals for internal and external customer RFPs

Additional job duty:

Information System Security Officer (ISSO):

Provided general IT support services for a small office

Oversaw migration to enterprise network software

Responsible for routine classified AIS maintenance

Electrical Engineering Intern

March 2010 - June 2011 (1 year 4 months)

Design of electronics for high altitude applications (~100,000ft). These included a GPS tracking and location transmitting system, emergency location transponder system, and miscellaneous additional hardware.

U.S. Anti-Doping Agency

MATLAB Consultant

September 2010 - August 2012 (2 years)

Development of MATLAB algorithms to perform automated Bayesian analysis on various chemical samples.

Variant Embedded Systems, Inc.

Engineering Technician/Design Intern

June 2008 - March 2009 (10 months)

Created bills of materials and ordered parts for various projects, printed circuit board layout, designed hardware for testing and prototyping, developed systems for a variety of applications, from both existing schematics and from initial concept through creation of schematics to PCB layout

Oregon State University IEEE Store

Manager

May 2006 - May 2008 (2 years 1 month)

Interacted with customers on a regular basis, dealt with various electronic equipment, responsible for maintaining large stock of various parts, coordinated volunteers that staff the store, oversaw a budget of \$10,000 and a stock of over \$10,000

Oregon State University School of Electrical Engineering and
Computer Science

Undergraduate Teaching Assistant

April 2006 - March 2007 (1 year)

Aided students in using laboratory equipment, helped reinforce basic electrical engineering concepts in students

Oregon State University Technology Support Services
Student Consultant/Student Technician
January 2006 - November 2006 (11 months)

Assisted end-users through solving various small problems, solved various more difficult technical problems, set up machines to end-user requirements

Education

Colorado Technical University
Master of Science, Systems Engineering · (2009 - 2011)

Colorado Technical University
Master of Science, Electrical Engineering · (2009 - 2010)

Oregon State University
Bachelor of Science, Electrical and Electronics Engineering · (2005 - 2009)