

Gerald Sandoval

gsandoval.net • Albuquerque, New Mexico 87110

OBJECTIVE: Career in test or software development

TECHNICAL TOOLBOX:

Languages & OS	Imperative: C, C++ Script: Perl, Python OS: Linux Assembly: Harvard, I86
Web Development	HTML5, CSS3, Bootstrap, JavaScript, MySQL, PHP and Angular JS
Analog Electronics	Extensive use of oscilloscopes and network analyzers for the purpose of analog electronic testing and trouble shooting. Able to read electronic schematics.
Aerospace	Software Certification: Requirements based test verification and validation of safety critical aircraft software according to DO-178b (and c) guidelines at level A, B, and C.
General Technology	Knowledgeable in general computer architecture, operating system concepts, and networking. Familiar with linux kernel module programing.
General Skills:	Excellent technical writing skills. Good interpersonal skills. Able to collaborate with team members in order to achieve project goals. Able to present well at formal presentations for the purpose of design review.

RELEVANT COURSEWORK

Central New Mexico Community College (CNM), Albuquerque, NM July - September 2016

Deep Dive Coding Bootcamp at the STEMulus Center – Full Stack Web Developer Program

Certificate of Completion – Web Development

Participated in developing a team Capstone Project and personal website.

University of New Mexico,

Spring and Fall Semesters 2016

Currently enrolled in Senior Level Engineering courses for the purpose of professional development.

EDUCATION:

B.S. Electrical Engineering, 1998, University of New Mexico, Deans List (Spring1998)

EXPERIENCE:

DO-178b – Verification and Validation for the Aerospace Industry (2006-present)

Requirements based testing of aircraft software. Wrote, updated and debugged test scenarios and procedures. Implementation of scenarios into detailed procedures using test scripts and test applications for automated and manual implementation. Collaboration with designers for purpose of discussing failures or elaboration on design requirements. Preparation of detailed reports for the purpose of presenting results and test failures. Verification also included manual code inspection which includes detailed software code analysis when testing was deemed impossible. Implementation and analysis of code coverage. Rational DOORS trace matrix tool for management of design requirements, test cases and test procedures. Familiar with the life cycle process. Strong debugging skills are required in this line of type of work. All programs I worked with were written in C.

WORK EXPERIENCE:

Rockwell Collins, Cedar Rapids, IA and Wilsonville, OR

July 2014 – Dec. 2016

DO-178c - Level A Verification for the Cseries program: Primary Flight Control Computer and Unit level testing for the Heads Up Display.

Avionic Instruments Inc, Avenel, NJ

March 2013 – July 2014

DO-178b - Level B Verification for a Digital Generator Control Unit for Embraer(Brazil).

Use of an In-Circuit-Emulator for code coverage and debugging

BAE Systems, Endicott, NY

Sept. 2011 – March 2013

DO-178b - Level A Verification for Actuator Control Systems on the fly by wire systems of the Bombardier C-series Aircraft.

Goodrich, Vergennes, VT

Jan. 2010 – Aug. 2011

DO-178b - Level A Verification for Fueling Systems on the Boeing 787 Project.

ENSCO Inc, (Hamilton Sunstrand) Rockford, IL April 2008 – Dec 2009

DO-178b - Level B Verification for a Control Unit for Aircraft Bus Power for Boeing P8 Poseidon Military Aircraft.

Astronautics Aeronautics Corporation, Milwaukee, WI

Aug 2006 – Mar 2008

DO-178b - Level D Verification of Embedded Software for a Network Server System for Airbus400 Military Aircraft.

DO-178b - Level C Verification of Display Unit Firmware for the 787 Electronic Flight Bag Project.

New Mexico Software, Albuquerque, NM

Jan. 2002 – Aug. 2006

Design and development of web based applications using PHP and apache server (database). Customers included medical and entertainment companies.

1998-2001 **Honeywell Defense Avionics**, Albuquerque, NM

Software Engineer; Honeywell Military Air Transport Displays Team, Dec '99- June '01

Development of software, requirements, and verification of Real Time embedded systems for a board support package for a smart-LCD military aircraft color matrix display on Honeywell Proprietary Safety Critical Space and Time Partitioned Operating System.

Product Engineer, Honeywell F-16 DisplaysTeam, Aug '98 - Dec '99

Offered manufacturing and customer support and problem resolution as well as final testing of several military aircraft, flight computer, display systems including the F-16 monochrome multifunctional display(s).

Internship, Honeywell 1998

Testing and trouble shooting of power supplies and electronic test tools used for flight computers in military planes. I was an under-graduate student when I worked this job.

SPECIAL SKILLS/ INTERESTS: Personal interests include music. Main instrument is guitar. Genre includes blues/rock and classical (wish I had more time for this pursuit). Secondary instrument is piano. I love nature and love to hike in wilderness areas. Walking is my main source of physical activity. I love sporting events and athleticism in general. Favorite web sites are wikipedia and cracked.com. I do not like social media. I do not have a facebook page.