

ROGER W. BEST

Permanent Residence: Carlsbad, CA

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Temporary Residence: Federal Way, WA

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QUALIFICATIONS

Multi-disciplined engineering professional with extensive experience in product development, mechanical design, aerospace design, automotive manufacturing, and machine design. Experience in leading design teams in the concept, design, and development of engineered products. Clearances: Top Secret-DOD & Top Secret-SSBI (Both Inactive).

Formal Education: BSIT, MS Product Development Engineering (Systems Eng.), MBA in Finance

PROFESSIONAL STRENGTHS

-Aircraft Structures -Aircraft Subsystems -Responsible Engineer -Mechanical Design -Tool Design
-Project Manager -Proposals / SOW -Business Case Development -Team Leader -Project Lead

PROFESSIONAL EXPERIENCE

THE BOEING COMPANY (Contracted by Chipton-Ross), Auburn, Washington

August, 2011-Present

Senior Design Engineer

- I am working in the Advanced Metal Structures group, designing complex tooling, fixtures, and dies to fabricate titanium and aluminum components for various aircraft programs. I have designed water jet tools, used for final trim, forming dies, joggle dies, assembly jigs, drill jigs, carts, and trim tools. Flat pattern creation of templates for robotic spot welding. Surface manipulation for CTE (coefficient of thermal expansion) adjustments of engineering data, for use in high heat forming.
- Regular and very close interaction with Manufacturing Engineering and Quality Engineering.
- Design of large super-plastic forming dies (SPFD), utilizing extensive production part surfacing manipulation and creation.
- Extensive use of surfacing, solid modeling, part and assembly creation, and drawing creation using GD&T, CATIA V5R20.

NORTHROP-GRUMMAN, Rancho Bernardo, California

2005-2011

Business Case Development, Financial Projections, RFI & RFP Development (Product Support Organization)

- Worked on developing financial estimates (ROI, ROS, NPV, and IRR) for determining training costs and pricing, along with additional business cases to justify funding for the development of a new training system pricing model.
- Formerly worked on a response to an RFP for the Euro Hawk program. Used Rational Doors to develop requirements and formalize system specifications for an initial statement of work.
- Coordinated the effort for a response to an RFI for a weapons systems trainer program as a co-Project Manager.

Senior Engineer / Project Manager

- I worked on installations, structures, and subsystems design on the KQ-X (Global Hawk-to-Global Hawk tanker program).
- I worked as a Responsible Engineer on the Advanced Technology Development Center (ATDC) in installations.
- I worked on NX4, for design on subsystems on ATDC. I also reviewed qualification certificates for various components.
- Lead an installation project for an antenna system on the Global Hawk Unmanned Aerial Vehicle program-MP-RTIP.
- Coordinated the integration and mechanical design on a ground station for the Fire Scout unmanned helicopter.
- Helped to develop a statement of work for the Fire Scout ground station. Interfaced with suppliers and collaborated closely with other members of the engineering department to finalize time critical portions of the project.
- Worked on installations of LRU's and secondary structural components. Developed composite parts, to be used for shielding on an antenna installation. I also designed SLS and roto-mold fabricated ducting components and assemblies.
- Designed primary structural frames, secondary structural components, and arresting gear for the UCAS unmanned fighter jet.

ROCKWELL-COLLINS (Contracted by Qualstaff), Carlsbad, California

2004-2005

Senior Designer

Developed tooling for the fabrication of head mounted displays for military applications. Involved in product design of head mounted displays and peripheral equipment utilizing Pro-Engineer [Wildfire 2.0].

- Designed electro-mechanical enclosures of controllers for heads-up displays. Designed tooling fixtures for test and assy.
- Designed and created prototypes, instructed production personnel on the assembly procedures to streamline building of electronics enclosures. Worked on designing portions of heads-up displays for military applications.
- Collaborated with marketing to design custom prototypes for presentations at trade shows.

BOEING SPACE & INTELLIGENCE SYSTEMS, Seal Beach, California

2003-2004

Engineer/Scientist

Produced animations for the business development department using 3DS Max, Pro-Engineer, CATIA V5, Solidworks, and various other applications. Translated CAD models to create realistic animations for senior management to present to customers.

- Modeled complicated part and assembly CAD models, which were then translated into 3DS Max.
- Created complex animations and renderings depicting overall project level scenes of TS programs for the military.

NORTHROP-GRUMMAN (Contracted by Chipton-Ross), Rancho Bernardo, California

2002-2003

Senior Designer

- Designed subsystems tube and hose routing assemblies, with Pro Piping, for the Global Hawk Unmanned Aerial Vehicle program in collaboration with the Mechanical Subsystems group.

Senior Designer

- Involved in the design, layout, and detail of opto-mechanical infrared sights for military vehicles. Managed prototype production – from concept through fabrication. Designed a large portion of an opto-mechanical turret, interfacing to an unmanned, rugged terrain vehicle.
- Packaged opto-mechanical and electro-mechanical projects with Pro-Engineer 2001, also used Intralink 3.1.
- Collaborated with senior management on the development of new designs. Coordinated manufacturing with external suppliers to fabricate complex machined parts. Organized and coordinated designs with the optical engineer regularly.
- Developed an Access database to log errors, failure mode and effects analysis, for several software projects.

XCELLSIS FUEL CELL ENGINES [Joint venture with Ford, Daimler-Chrysler, & Ballard Power] (Contractor)1999-2001

Senior Designer

- Began development and the design of an assembly line, for assembling fuel cell engines.
- Designed and managed all tooling mechanisms, test stand structures, and fixtures for the assembly of automotive fuel-cell engines. I also spent considerable time designing components and subassemblies for bus and car fuel-cell engines.

EATON LEONARD (Contracted by Selective), Carlsbad, California

1999

Senior Designer

- Designed Tube Bending Machines and managed the designs end-to-end using Pro-Engineer, ProPDM, and ASME-Y14.5M.

SOLAR TURBINES (Contracted by CDI), San Diego, California

1996-1999

Senior Designer

- Designed, developed, and detailed large turbine engine structural/internal components and assemblies. I modeled nozzles, blades, and other intricate aluminum castings using Pro-Engineer. Also used ProPDM and ANSI-Y14.5M.

LAWRENCE LIVERMORE NATIONAL LABORATORY (Contracted by Onsite), Livermore, California

1996

Senior Designer

- Designed mechanisms and mechanical components for the National Ignition Facility (NIF) -Laser Activated Fusion Program.

DELCO SYSTEMS OPERATIONS (Contracted by A.M. Engineering), Santa Barbara, California

1993-1996

Senior Designer/Associate Engineer

- Directed the design of mechanical systems for a military light armored vehicle, electro-mechanical packaging, and an intricate hatch design from concept through fabrication; utilized Pro-Engineer, CADAM, and CADRA.
- Developed a sophisticated hatch design with over 40 components; conceptualized, developed, and advanced the project. Collaborated with the manufacturing department on fabrication and assembled prototypes.

From 1988-1993: I worked in aerospace as a Senior Tool Design Engineer and as a Team Leader over eight engineers.

From 1979 - 1988: I worked in the automotive industry developing automation equipment, conveyor systems, press welders, checking fixtures, and test stands. I helped to develop automated test stands for the Dodge Viper engine. I designed a large portion of a test stand for a Ford windshield wiper/reservoir assembly project. I designed large portions of test stands for GM, Ford, and Chrysler transmissions and engines. I also worked on PLC control systems for three of those years.

FORMAL EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles, California

Master of Science in Product Development Engineering (Systems Eng.), MS, 2010

<http://gapp.usc.edu/graduate-programs/masters/industrial-systems-engineering/product-development-engineering>

PEPPERDINE UNIVERSITY, Malibu, California

Master of Business Administration, MBA-Finance, 2008

<http://bschool.pepperdine.edu/programs/mba/>

UNIVERSITY OF PHOENIX, Del Mar, California

Bachelor of Science in Information Technology, BSIT, 2002

<http://www.phoenix.edu/programs/degree-programs/technology/bachelors/bsit-se.html>

CERTIFICATIONS

LEAN SIX SIGMA GREEN BELT - Northrop Grumman – Rancho Bernardo - 2011**STANFORD UNIVERSITY – Composites Design Workshop 5 – 2011****HUMPHREY'S & ASSOCIATES – EVMS, Cost Account Management, and scheduling courses - 2012**

TECHNICAL EXPERTISE

CATIA-20,000 hrs, Pro-Engineer-25,000 hrs, Unigraphics-4,000 hrs, ASME Y14.5M, Teamcenter, Enovia, Solidworks, MS Excel, MS Project, MS Access, 3DS Max, Maya, Photoshop, C, C++, Visual Basic, SQL --- Mensa Member