ROBERT L. BENOIT PE

13112 West Micheltorena Drive, Sun City West, AZ 85375 ♦ (623) 734-6954 ♦ bobcatrambler@yahoo.com

CAREER SUMMARY

Accomplished results-oriented professional with a strong academic foundation and over 40 years of hands-on experience in leadership roles. Proven record of success as an Educator, Mechanical Engineer and Patented Inventor. Enthusiastic professor with a passionate commitment to student development and the fostering of a positive learning environment. Proficient in course curriculum development, with a wide range of knowledge in different course subjects. Outstanding communications skills. Collaborates effectively with students, staff and administration. Named as inventor on 15 patents. Proficient in Microsoft Office software

AREAS OF EXPERTISE

Curriculum Development ● Interactive Learning ● Classroom Management ● Leadership
Mentorship ● Student Assessment ● Presentations ● Communications ● Online Teaching ● Technology
Mechanical Engineering ● Management
Problem Solving ● Program Management ● Blackboard ● Learning Studio Online

PROFESSIONAL EXPERIENCE

ASU POLYTECHNIC, Mesa, AZ 2008 - **Present**

Faculty Associate – School of Letters and Sciences

- Serves as Faculty Associate and in an instructional capacity for online learning center. Methodically designed and currently teaches the course entitled "History of Science and Technology". Recognized for the proficient redesign and current instruction of course, "Science, Technology and Society".
- Utilizes such programs and software as PowerPoint, Word, Excel and Camtasia to create engaging lectures that are stimulating and educational. Meets with class online in an interactive environment (Google Hangout) where they discuss current topics relevant to the course.
- Applies proficiency in online teaching systems, including Blackboard and Learning Studio Online in order to integrate educational materials for presentation.
- Implements various teaching methods and procedures to maintain the highest standard of academic excellence. Provides 1:1 support to students, as needed.
- Collaborates with students and academic teams. Provides course feedback.
- Ensures that students have a solid understanding of the class material. Conducts assessments and exams and grades student learning.
- Pro-active with students regarding performance. Enthusiastically encourages pupils to reach their highest potential in the course.

Key Accomplishments:

- Provides a refreshing teaching style for effective and engaging student learning. Uses Google Hangout as classroom, where students can actively collaborate both visually and audibly.
- Adds innovative resources to enhance student comprehension. Brings course material to life and keeps content fresh and relevant.
- Recipient of numerous positive reviews from students for novel teaching approach, class interest and compassion as an instructor.
- Acknowledged for attracting an enrollment of 105 students in one class, over 50% increase in enrolled students.
- Has successfully instructed over 1,000 students in the 2 ASU classes. Positive feedback includes: *"This teacher seemed to be more interested in the success of the students in his class than any other teacher I've had at ASU." "This instructor clearly demonstrated the acceleration of scientific and technological breakthroughs from a personal perspective. His direct participation as an engineer in the American space program with his personal testimony of that era is a powerful message." "He has a very rare, genuine, and crucial attribute as a teacher – he is DEVOTED to each individual's success. I would like whoever reads*

this to know that this instructor played a significant role in my academic success and I will be forever grateful."

FUEL CELL COMPONENTS AND INTEGRATORS, INC. (FCCI), Hauppauge, NY, 1995 - **2006**
Engineering Vice-President

- Responsible for managing the technical activities for the company, which designed and manufactured large volume commercial products associated with electromagnetic pulse forming and hydrogen fuel cell technology
- Adeptly established a customer base in the automotive, medical, aerospace and recreational areas for products of advanced design.
- Successfully won programs for prototypes that resulted in production subcontracts or royalty payments.

Key Accomplishments:

- Designed and tested a fuel cell powered wheelchair. This prototype is the basis of a similar wheelchair currently produced by a Japanese manufacturer.
- Spearheaded and implemented a magnetic pulse welded metal hydride canister used to store and supply hydrogen to fuel cells.
- Designed and tested a magnetic pulse welded driveshaft for the automotive industry.
- Supervised a team of engineers and played a key role in the design and production of a next generation more powerful and efficient magnetic pulse welding machine.

Grumman Aerospace Corporation, Bethpage, New York 11714
Engineering Specialist - Advanced Flight Control Systems

- Supervised advanced development programs that covered multiple industries. The primary focus of these programs was the development of advanced flight control systems / components for aircraft. Customers included: US Navy, US Army, US Air Force, and Boeing.
- Led seven government-funded programs to develop a hydro-fluidic flight control system for unstable aircraft. These were multi-service programs, which required extensive interface between all branches of the military.
- Managed as Project Engineer the Electromagnetically Formed Torque Tube Program. Developed design methodology, and stress calculations that became a Grumman Engineering Standard. Named co-inventor of this product, which is used in three Boeing models and generated licensing revenues from Boeing totaling $10 million dollars over a 10-year period. Taught Boeing mechanical design and stress engineers the design and analysis methods required to achieve a success.
- Designed one of the hand controllers (Thrust/Translation Controller Assembly - TTCA) used to land man on the moon. Had complete responsibility as cognizant engineer for both the TTCA and the other hand controller (Attitude Control Assembly – ACA) which was used for rotational control of the Lunar Module. Responsibility included component testing, vehicle integration testing, maintaining production schedules, anomaly investigation and mission support.

EDUCATION

- **Master of Science,** Management Engineering, Long Island University, C.W. Post Campus, Long Island, NY
- **Bachelor of Science**, Mechanical Engineering, University of Massachusetts, Boston, Massachusetts

CERTIFICATIONS, LICENSES & ASSOCIATIONS

- NY State Professional Engineer, License # 050898

Patents

U. S. Patent Nos. 3,837,755; 4,523,872; 5,743,810; 5,776,016; 5,916,039; 5,937,496; 5,954,593; 5,979,694; 6,123,353; 6,6389,697; 6,420686; 6,452,139; 6,557,252; 6,561,722, and 6,779,550

AWARDS

- Special Inventor Award, presented by the Grumman Intellectual Property Committee for the Torsion Resistant Grooved Joint Patent