Richard Eric Rasmussen,

5590 Moonshadow St., Simi Valley, CA 93063, (805) 526-8458 rerasmussen@earthlink.net

Title: College Physics Lab Professor, Business Owner & Mechanical Engineer

Skills:

- Exceptional youth motivational skills acquired over sixteen years coaching and mentoring over a hundred Boy Scouts, aged 10 through 18.
- Currently applying Active Learning teaching skills as Physics Laboratory Professor at California Lutheran University
- Self-driven and motivated, through owning and successfully leading an aerospace product development company for twenty-four years.
- Successfully completed all Boy Scouts of America Training, including Youth Protection, Health & Safety, Trainer's Edge, and Wood Badge
- Bachelor's Degree in Mechanical Engineering.

Work Experience:

Study Smart Tutors, Inc., <u>http://studysmarttutors.com/</u>Agoura, CA Tutor assisting underserved High School raise their SAT and ACT scores through motivational interaction and skills development, Since March 2013

Role:

- Teach and motivate classes of approximately 25 underserved High School students to improve their SAT and ACT test scores.
- Assist students to self assess the raw standardized test scores needed for entrance to five colleges of their choice, then using class skills, devise strategies to exceed scores on practice tests.
- Explain, demonstrate, guide and enable students to master specific test skills sets that will enable them to improve their standardized test scores.

California Lutheran University, <u>http://www.callutheran.edu/</u> Thousand Oaks, CA Adjunct Lab Instructor for Calculus Based Physics & Physics for Liberal Arts Students, Since September 2012

Role:

- Teach approximately 100 students in four laboratory sessions, and assist them to conduct experiments, collect data and analyze results related to college Physics lecture subjects.
- Utilize active learning techniques to make subject matter both relevant and rewarding, and thereby increase subject mastery through personal and team explorations.
- Coach students individually on Physics knowledge and skill acquisition.

Scouts of America, Troop 642 <u>http://www.bsatroop642.org/</u> Simi Valley, CA Scoutmaster & Assistant Scoutmaster, Since May, 1995

Role:

- Guide, coach and instruct approximately 40 boy scouts each year, from middle school through high school, on boy Scout skills, ranging from leadership, camping, cooking, first aid, specialized life skills, physical fitness, community service, and ethics.
- Regularly practice active learning techniques to make subject matter and skills both relevant and rewarding, with an emphasis on self-improvement., goal setting and motivation.
- Merit Badge Councilor for Cooking, Camping, Hiking, Climbing and Robotics.
- BSA Climbing Director
- High Adventure Team Chairman, and Winter Backpacking Course Director

Guidance Dynamics Corporation, (<u>http://www.guidancedynamics.com/</u>) Simi Valley, CA President and Chief Financial Officer since 1989

Role:

- Founded Guidance Dynamics Corporation in 1989. Continually served as President and Chairman of the Board from inception.
- Provided mechanical and pneumatics engineering oversight for nearly all of the company's projects. Possesses detailed and specialized knowledge of pneumatic control systems, including thruster, actuator, reaction wheel and control moment gyro design, fabrication, assembly, system integration, testing, and installation.
- Served as Program Manager for over 300 successful firm-fixed-price hardware and software development programs and proposals for customers including the Jet Propulsion Lab (JPL), Boeing, Raytheon, Lockheed-Martin, Honeywell, NASA GSFC/WFF, Naval Research Laboratory, the Canadian Space Agency and numerous university laboratories. Successfully completed \$2.5 million Formation Control Testbed contract for JPL in 2009.
- Proficient in SolidWorks®, MS Project®, MS Office®, Adobe Acrobat®, Deneba Canvas®, Mac OS X, Windows Vista
- Maintains a practical working knowledge of AutoCAD®, MatLab®, Basic and C programming, finite element analysis.

Papers:

Gallardo, D., Bevilacqua, R., Rasmussen, R. E., "Advances on a 6 Degrees of Freedom Testbed for Autonomous Satellites Operations", AIAA-2011-6591 paper, AIAA Guidance, Dynamics and Control Conference 2011, Portland, OR.

Agrawal, B. and Rasmussen, R. E., "Air Bearing Based Satellite Attitude Dynamics Simulator for Control Software Research and Development", in Proceedings of the SPIE Conference on Technologies for Synthetic Environments: Hardware-in-the-Loop Testing VI, (Orlando, Florida), pp. 204-214, April 16-18- 2001.

Education:

BS in Agricultural Engineering (Mechanical Engineering Department), minor in Material Science, University of California, Davis

Post Graduate Courses in Spacecraft Control Systems, UC, Los Angeles

BSA Trained in twenty subjects, including Youth Protection, Health & Safety, Trainer's Edge, and Wood Badge

Community Service:

Scoutmaster of Boy Scout Troop 642, Simi Valley since 2001, and recipient of the Silver Beaver Award, District Award of Merit and District Scoutmaster of the Year three times.