

Fawzi Philip Emad (Two Page Résumé)
{ longer version available }
Email: femad "at" fpemad.com

Job Objective: A part time consulting/teaching position in electrical engineering in the general areas of dynamic systems, simulation, system control, digital control, circuits, electronics, electric power systems, and electromagnetics.

Present Location: Venice / Los Angeles, CA.

Education: Ph.D. in electrical engineering, Northwestern University, 1966.

Experience:

- **Consultant:** (A partial list follows.)
 - David Taylor Research Center in Annapolis, MD (US Navy.) Research in the area of electromagnetic launchers. Two launchers were actually constructed and tested. A third very large launcher was completely designed (for a feasibility study.) [1, 2]
 - Naval Research Laboratory, Washington, DC. Design of a gimbal controller for a special airborne radar. [3]
 - Pulse Electronics, Germantown, MD. Designed a miniature air driven motor. This work was of a proprietary nature hence there are no publications. The resulting motor was of a very new and innovative design.
 - Eastalco, Frederick, MD. Research on nondestructive testing of anodes used in the production of aluminum. This resulted in an international patent (# 5,473,248) issued on December 5, 1995 "Method and Apparatus for Non-Destructive Detecting Flaws in a Carbon Anode." [4]
- **Educator:** (University of Maryland, College Park, Dept. of Electrical and Computer Engineering. Over thirty publications and a list of courses taught will be provided upon request.)
 - 1998—Present: Professor Emeritus.
 - 1987—1998: Professor.
 - 1987—1996: Associate Chairman of the Dept., in charge of Graduate Education.
 - 1972—1980: Director of Undergraduate Education in the Dept.
 - 1970—1987: Associate Professor.
 - 1967—1970: Assistant Professor.

Member: IEEE, Sigma Xi, Eta Kappa Nu, Tau Beta Pi.

Sponsored Research: Over \$3,900,000 in research funds over a period of nearly thirty years.

Hobbies and Interests: Woodworking, bicycling, birding, gardening, construction.

References: (Only four references referred to in this Résumé are shown below. Additional references are available upon request.)

1. Emad, Fawzi P., Steen, D., Waltman, D., Ruby, W., Superczynski, M., "*DTRC Laboratory Electromagnetic Accelerator, System Design, Modeling and Simulation.*" IEEE Transactions on Magnetics, Vol. 25, No. 1, January 1989, pp. 170-173.
2. Emad, Fawzi P., Steen, D., Waltman, D., Ruby, W., Superczynski, M., "*DTRC Electromagnetic Launcher With Feedback Control.*" IEEE Transactions on Magnetics, Vol. 29, No. 1, January 1993.
3. Emad, Fawzi P., Novak, H., Condon, J., "*Nearly Time Optimal Servomotor Control,*" presented at the First IFAC Symposium on Design Methods of Control Systems, Zurich, Switzerland, September 1991.
4. Emad, Fawzi P., Haldemann, P., Nispel, A., Logan, L., "*The In-Line Inspection of Carbon Anodes for Aluminum Production.*" JOM, pp. 18--23, vol 48, No. 2, February 1996.