Frank Varosi - Senior Software Engineer - UF

EDUCATION: 1985 MS Applied Math, University of Maryland

1978 BS Mathematics,

George Mason University

PROFESSIONAL EXPERIENCE:

<u>2000 – present:</u> Senior Software Engineer, University of Florida, Gainesville FL.

- Leads full life-cycle design, development, configuration management, integration, testing, and deployment of client-server networked software systems used for remote monitoring, control and observing with spectrometers and imagers in visible and infrared.
- Extensive experience developing instrument control and data acquisition software on Solaris, Linux, and MacOS, with TCP/IP using BSD Sockets and CORBA.
- Developed applications and client-server programs using C++, Java, Perl, Python, IDL, Fortran, with XWindow GUIs, on UNIX platforms, with object oriented design.
- Lead Software Engineer for control and data acquisition systems on CanariCam, an infrared imager/spectrometer facility instrument for the GTC.
- Leads control and data acquisition systems software development for MARVELS, EXPERT and FIRST spectrometers.
- Team member of CIRCE, MIRADAS, T-ReCS and FLAMINGOS infrared projects.
- Performed research in the areas of atmospheric science, chaotic dynamics, fluid dynamics, and astrophysics, with continuing collaborations.

<u>1989 - 2000:</u> Senior Programmer with Raytheon ITSS, at NASA/GSFC, Greenbelt MD.

<u>1986 - 1989:</u> Engineering Physicist, University of Maryland, College Park, MD.

<u>1983 - 1986</u>: Computer Scientist, Hughes STX Corp., at NASA/GSFC, Greenbelt, MD.

1978 - 1983: Technical staff, CSC, at NASA/GSFC, Greenbelt, MD.

Awards:

NASA, ACS/HST Group Achievement Award 1998; NASA, STIS/HST Group Achievement Award 1994; NASA, COBE Group Achievement Award, 1991.

Publications (selected):

- "Analytical Approximations for Calculating the Escape and Absorption of Radiation in Clumpy Dusty Environments", 1999, ApJ 523, 265-305, F. Varosi & E. Dwek.
- "IDL Based Image Deconvolution Software Package" and "MOSAIC: IDL Software Package for Collections of Images", 1993, ADASS II 52, F. Varosi & D. Gezari.
- "The Spectrum of Fractal Dimensions of Passively Convected Scalar Gradients in Chaotic Fluid Flows", 1991, Physics of Fluids 3, 1017-1028, F. Varosi, E. Ott, & T. Antonsen.
- "Simplicial Approximation of Poincare maps of Differential Equations", 1987, Physics Letters A 124, 59-64, F. Varosi, C. Grebogi, & J. Yorke.