Terry Smith

Objective

Challenging work with expert scientists and technicians. A position that takes advantage of my multidisciplinary skills and proficiencies.

Summary of qualifications

- Currently working for Draper Laboratory in the Embedded Software division. Experience with all phases of project development, from requirements specification to field testing and installation
- Lecturer for Aero/Astro Engineering at MIT, teaching embedded and real-time systems
- University coursework in Electrical and Computer Engineering, Computer Science, Languages, International Relations.
- Involved in computer programming and hobbyist electronics since elementary school.

Security clearance

TS/SCI with full scope polygraph

Recent Work Experience

2000 – Present   Draper Laboratory   Cambridge, MA

Embedded Systems Engineer

- Signal processing and conditioning of communications signals on a TMS SAM-450 and Sun Ultra running Solaris. Cross-platform data collection and analysis using Matlab and custom data gathering tools.
- Implementation of inertial and GPS navigation algorithms on PowerPC and Xilinx platforms using Wind River Tornado environment
- Development of navigation system interface software between custom processor board and COTS GPS card

Spring 2001, 2002   MIT Aero/Astro Engineering   Cambridge, MA

Assistant Instructor

- Assisted with curriculum development in an effort to add a component of real time and embedded systems to a programming/software engineering course for MIT Aero/Astro undergrads (MIT 16.070)
- Prepared and taught ~20 lectures on real time systems, embedded software development, and C programming to 160 students over 2 semesters. Developed IR beacon electronics to support the final project.

1997 – 2000   TRW   Columbia, MD

Systems Engineer/Software Developer

- Development of real time and time-sensitive signal processing applications using Wind River Vx-Works and Sun Ultra/Solaris platforms
- Installation and field support of mission-critical systems in remote areas
- Optimization and modification of software vocoder systems
- Internal research and development
- Software development in C, C++, Java. System integration using Xilinx FPGAs, COTS and GOTS equipment

Education	**Massachusetts Institute of Technology**
	Graduate Coursework
	- MAS-967 Sensor Technologies for Interactive Environments
	University of Maryland, Baltimore County
	BS – Computer Science w/ International Relations minor
	- Alumni Association Outstanding Undergraduate Award and Grant
	- Golden Key National Honor Society
	- Second undergraduate teaching assistant in university history
	Florida Institute of Technology
	Electrical Engineering and Computer Science Coursework

Languages	- C, C++, Perl, Matlab, VHDL, Java, Assembler, Pascal, FORTRAN_77, BASIC
	- English (native), French, some German

Other Work Experience	**University of Maryland, Baltimore, MD**
	Teaching Assistant / Tutor
	- Created and presented two one-hour discussion sections per week for Computer Science I and II
	- Developed a web-assisted lecture on symbolic debuggers and debugging techniques, which was presented to several 350-person lecture classes
	- Substituted for professors' lectures as needed
	- Assisted Computer Science and Information Systems students with coursework including Assembly Language, Data Structures, Principles of Programming Languages and Intro to Object Oriented Programming
	UMMS Hospital, Baltimore, MD
	Telecommunications Technician Trainee
	- Trained in telephone electronics and TCP/IP networking
	Dept. of Anesthesiology, U of MD, Baltimore, MD
	Research Assistant
	Maintained and updated a PC-based data acquisition system that interfaced with medical monitoring equipment in an ER and superimposed real-time data onto a videotape of the surgical procedures. Code was in C and Assembler

Other Activities	- UMBC Honors Program, 96-98
	- Bartender, PJs of Ellicott City, 96-97
	- Professional Ski Instructor, Berchtesgaden, Germany, 95-96
	- Migrant Farm Worker, Avignon, France, 1994
	- College TV Station Manager, Florida Tech, 90-92