

JEANNE M. STEUBER

jms77@drexel.edu

EDUCATION

Masters of Science, Major: Computer Science, Boston University, Boston, MA (1990)

Bachelor of Science, Major: Computer Science, Drexel University, Philadelphia, PA (1986)

Certified to teach secondary mathematics in state of Pennsylvania, December 2011

TEACHING EXPERIENCE

DREXEL UNIVERSITY, Philadelphia, PA

Associate Teaching Professor (Jun 2017-Present) / Assistant Teaching Professor (Jun 2010-Jun 2017) / Instructor (Sep 2005-Jun 2010)

Developed and taught Precalculus/Trigonometry course

Fall in 2015-2021, Winter 2021

Taught Discrete Computational Structures

Spring in 2008, 2010, 2012, 2013, 2015-2022

Taught Introduction to Analysis sequence courses

2005-2006 through 2017-2022 Academic Years

Taught Mathematical Foundation for Design recitations

Spring 2018-2020

Taught Mathematics for the Life Sciences

Spring 2022

Adjunct Instructor

Taught C/C++ programming sequence courses for IST majors.

Fall 2001-Spring 2002, Fall 2002-Winter 2003

Taught undergraduate level C Programming course.

Winter 1996

Taught graduate level Machine Organization course.

Fall 1995

ST. JOSEPH'S UNIVERSITY, Philadelphia, PA

Visiting Instructor

Taught Finite Math/Business Calculus sequence courses for business majors.

2004-05 Academic Year

HILLCREST ELEMENTARY SCHOOL, Drexel Hill, PA

Taught Logo to fourth and fifth grade students.

Feb-Jun 2005

AWARDS

Drexel SAAC (Student-Athletes) Make a Difference Day Award

April 2008

Selected by student athletes for teaching award in recognition of outstanding mentoring and teaching.

INDUSTRY EXPERIENCE

LOWER MERION AQUATIC CLUB, Ardmore, PA

Sep 2003-Jun 2005

Modified and maintained website for swim team.

SYNCRO TECHNOLOGY CORPORATION, Langhorne, PA

Nov 1999-Jun 2000

Contract software engineering firm specializing in design and development of embedded applications.

Software Engineering Contractor

- Developed graphical user interface classes based on Zinc™ windows targeted on Pentium board running VxWorks for Cytometrics Cytoscan medical imaging product. Utilized Rational Rose for design, coded in C++, and utilized Wind River Tornado for unit testing.
- Made enhancements to Datascope Accutorr patient monitor which has a Motorola 68302 processor. Enhancements included modifying the boot code and blood pressure displays, and auto-detecting among Datascope, Nellcor, and Masimo SpO2 boards. Procedure entailed modifying the design documents and code, and testing. Coded in C++ and utilized Applied Microsystems 68302 emulator for unit testing.

TruePosition, Inc., King of Prussia, PA

Jun 1997-May 1998

Manufacturer of 911 automatic location system for wireless subscribers.

Software Engineering Contractor

- Modified host processor software for Signal Collection System (SCS). SCS receives the reverse control channel transmissions occurring on all AMPS wireless phones using wideband digital receivers. SCS contains DSPs that process data from digital receivers and communicate with a Motorola 68302 host processor which forwards information to TDOA Location Processor (TLP). Coded in C and utilized MasterWorks debugger and Applied Microsystems 68302 emulator for unit and integration testing.
- Created a simulation for AMPS and TDMA demodulation algorithms to be performed by DSPs.

AYDIN TELECOM, Horsham, PA

Mar 1996-May 1997

Manufacturer of transcoders, multiplexers, satellite modems, and digital wireless telephony equipment.

Software Engineering Contractor

- Worked on the DSP Resource (DSPR) card which is resident in the Voice Compression Unit shelf of the Digicall Wireless Local Loop product based on the GSM standard. DSPR card performs TRAU (Transcoder Rate Adaptor Unit) function and consists of eight vocoder DSPs, one Framer/Mux/Demux DSP, and a Motorola 68360 host processor. COMSAT COSMOS operating system is resident on the 68360.
- Designed, coded, and tested the BTS interface, vocoder interface, and TRAU core subsystems on the 68360 for the DSPR card. DSPR routes compressed speech between the vocoders and the BTS. Coded in C and utilized EST ICE for unit and integration testing.

SUMMA FOUR, INC., Manchester, NH

Oct 1993-Jan 1995

Manufacturer of communication processors and networking equipment.

Senior Software Engineer

- Analyzed existing Network Bus Controller (NBC) code, written in 68000 assembly and utilizing MTOS operating system kernel, to determine the functionality of the NBC for redesign effort. NBC routes messages between system controller and port cards in system using a proprietary protocol. Redesign included replacing the 68000 processor with a 68360 processor, utilizing VRTX 32 OS, and coding in C.
- Produced functional specification and software architecture for NBC.
- Designed, coded, and tested the switch interface, polling, and command processing NBC subsystems. For unit testing, utilized Microtec Research MasterWorks debugger targeted on an EST 68360 Evaluation Board.

TELCO SYSTEMS, INC., Norwood, MA

Jan 1993-Jul 1993

A telecom manufacturer of multiplexer and fiber optic transmission products.

Senior Development Engineer

- Modeled software functionality of the HyperLynx 600 G-Bus (high speed backplane bus), FOX-ONE TBOS (telemetry byte oriented serial) protocol, and pSOS (real-time multi-tasking operating system kernel) using Statemate simulation tool. Implemented code in C to interface with the Statemate software models.

AYDIN CONTROLS, Fort Washington, PA

Apr 1992-Dec 1992

Manufacturer of color display generators, color monitors, and telecommunications equipment.

Senior Engineer

- Enhanced the remote terminal interface for Aydin's Model 9100 Transcoder, written in Intel MCS-51. Implemented the parsing and processing of remote commands to program the parameters and to display setup, alarms, and diagnostics of the transcoder.

RAYTHEON COMPANY, Marlborough, MA

Mar 1989-Apr 1992

Manufacturer of shipboard and ground radar, ballistic missile guidance electronics, and military communications systems.

Senior Engineer (1991-1992) / **Software Engineer** (1989-1991)

- Designed firmware for a SONET application.
- Designed, coded, and tested firmware for the STS-1 and STS-3 cards (Synchronous Transport Signal Levels 1 and 3) and modified the VT (Virtual Tributary) embedded code to interface with the VT ASIC.
- Modeled the transmit side of the VT ASIC (~16K gates) which was successful on the first pass.
- Coded in C, and Intel MCS-96 and MCS-51 assembly languages.

GTE GOVERNMENT SYSTEMS, Needham, MA

Jun 1986-Mar 1989

Manufacturer of command and control defense systems.

Software Engineer

- Designed real-time embedded applications for SOTRIN and TTC-39 telephone switches.
- Converted the data link protocol between the matrix switching unit device and the front end processor from HDLC to SDLC.
- Modified the front end processor and the matrix switching unit for new hardware card designs.
- Developed man-machine interface commands to assign multiple loops and trunks.
- Coded in Pascal, and Motorola 68000, Intel MCS-51, and Litton L3212A assembly languages.