

**MAURICE(Moe) S. WHEATLEY, JR.**

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**EXPERIENCE**

**MOETRONIX, Duluth, Georgia**

**Self-Employed Contract Electrical Engineer**

**March 2003 - Present**

- Developed SDR-14 Digital Receiver Hardware and PC based spectrum analyzer/receiver program for commercial test/analysis equipment market.
- Developed PIC based control hardware/firmware for manipulating Chiropractic equipment.
- Developed SDR-IQ Digital Receiver Hardware and PC based spectrum analyzer/receiver program for general purpose/Ham HF radio market.
- Developed 2.4GHz custom 802.15 radio firmware for Digitrax Inc. model train controllers.
- Wrote custom PC based production test system for Digitrax Inc. manufacturing.
- Developed Internet Labs Inc's DV Dongle hardware/firmware for D-Star radio network.

**MEDEX MEDICAL, Duluth, Georgia**

**Part Time Contract Electrical Engineer**

**July 2002 - Jan 2003**

- Developed Ethernet to RS232 firmware to interface multiple infusion pumps using Coldfire processor.
- Created small Irda to RS232 buffering firmware on MSP430 processor.
- Evaluation of various software tools.

**T/R SYSTEMS, INC. Norcross, Georgia**

**Senior Electrical Engineer**

**November 1991 - June 2002**

- Developed firmware to interface various high speed laser printers using 8051, 80188, and PowerPC based processor platforms.
- Created positioning firmware for a laser printer mechanism using DC servos and stepper motor controllers.

**COLOROCS CORPORATION, Norcross, Georgia**

**Senior Electrical Engineer**

**March 1984 - September 1991**

- Developed real-time control firmware for servo motors used to accurately position a light lens scanner and various image receptor belts for proper color imaging and registration.
- Created overall machine control and user interface firmware on a color printer product based on the copier print engine using a 64180 and 8097 processor.

STRATEGIC TECHNOLOGIES, Norcross, Georgia

Electrical Engineer

November 1983 - February 1984

- Designed a gas-plasma display interface board and a printer controller board for use in a 80186 based transportable computer.

PRINTACOLOR CORPORATION, Norcross Georgia

Electrical Engineer

January 1982 - November 1983

- Designed high performance digital controller board for a color ink-jet printer mechanism.

MOTOROLA, INC., Ft. Lauderdale, Florida

Electrical Engineer

November 1979 - January 1982

- Designed automated test systems as well as analyzed pager system design issues in the areas of power consumption, signal acquisition, and data recovery schemes.

## **PROGRAMMING**

- C, C++, and micro assembler languages including 8051, x86, and PIC processors.
- Various IDE's for different Microcontrollers.
- Microsoft Visual Studio C++ Windows Programming.
- VHDL programming.
- uCOS, VxWorks, and various custom RTOS experience

## **EDUCATION**

M.S.E.E. University of Illinois, Urbana IL 1980

B.S.E.E. University of Illinois, Urbana IL 1979

## **PUBLICATIONS**

M.S. Thesis - "Design of a Digitally Tuned, Frequency Synthesized FM Tuner"

Electronic Design Magazine, 10/28/82 - "Color Graphics Printer"

Digital Design Magazine, 12/82 - "Ink-Jet Modules Meet OEM Demands"

## **CERTIFICATION**

Engineer-in-Training (EIT), State of Illinois, 1979

## **PATENTS**

US Patent #4,847,660 - "Method and Apparatus For Registration Control in an Electrophotographic Print Engine" 7/11/89

## **NON-PROFESSIONAL INTERESTS**

Developing amateur radio communications programs and experimenting with DSP techniques using a PC or microcontrollers.