

# Jeffrey Edward McCarley

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## **EDUCATION**

Associate of Applied Science in Electronics and Computer Technology  
DeVry University, Phoenix, AZ                      October 2009

## **HARDWARE**

NCS OpScan series OMR scanners	PCs / Servers / Routers
ScanOptics 9000 series OCR scanners	Atmel / PIC / Parallax MCUs
FileNet OSAR	Altera FPGA

## **SOFTWARE**

Borland C/C++/Pascal	MPLab (Arizona Microchip)
Microsoft C/C++	Quartus (Altera)
Visual Studio (C#/Visual Basic)	FlowCode v3/v4 (Matrix)
SQL/ODBC/DAO/ADO/RDO	Boost C for PIC16 (SourceBoost)
Visual SourceSafe	Parallax P-Basic

## **SENIOR PROJECT**

Conceived, designed, developed, constructed and documented the “SunParser” hand-held photometer/shadow-band radiometer. Personally constructed and tuned sensor array module. Constructed and programmed prototype data acquisition unit. Delegated and supervised construction of presentation grade data acquisition unit.

The device utilizes the photo-currents produced by semiconductors during exposure to electromagnetic radiation. Low cost operational amplifiers in trans-impedance configurations convert photo-currents to measurable voltages which are then routed to the native ADC of a PIC16F88 microcontroller from Arizona MicroChip for processing. Formatted output is ultimately routed to a HD44780 compatible 16x2 parallel LCD for user review. The product is targeted toward hobby level science consumers and has applications in various fields of study including meteorology, climatology, and agriculture. Additionally, the sensor module is easily interfaced with popular development boards for custom programming or system integration.

## **EXPERIENCE**

### **Senior Programmer/Analyst (Scanning Operations)**

**Harcourt, San Antonio, TX**

**mid 90's to December 2006**

Provided general software development with emphasis on custom scanning applications running on NCS-Pearson and ScanOptics platforms. Responsible for highly accurate and efficient processing of Department of Education (DOE) achievement test documents. Provided metric data and aggregate reports for throughput, error tracking, and statistical process control. Efficiently provided temporary and permanent solutions for various unforeseen production issues in a high pressure, high stakes environment.

**Scan Technician / Quality Control / File Clerk**

**Southwest Information Management Services (SWIMS), Tempe, AZ May 2010 to present**

Index and archive medical records for various contracts with customer specific requirements.

Review, analyze, correct operator output and provide feedback for improvement.

Manage warehouse of medical records stored in terminal digit order.

Perform preventive maintenance and calibration of imaging equipment (bi-monthly and on demand).

Provide IT support and performance analysis for small LAN.

**SUMMARY**

An experienced, flexible, creative and inspired problem solver effectively providing emergency, short term, long term, and scalable solutions for mission critical production environments. Interested in a position utilizing my skills in both the software and hardware domains for maintenance and/or development endeavors.