

# Arthur L. Farnsworth

## SUMMARY OF SKILLS

MIL-STD and commercial documentation including specifications and user's manuals, preparation and presentation of speeches for Toastmasters and sermons/studies for church. OpenOffice and Microsoft Office software experience.

## EDUCATION

Widener University, Chester, Pennsylvania. Bachelor of Science Degree in Engineering. Major: Electrical Engineering.

Penn State University, Great Valley, Pennsylvania. Master of Science Degree in Engineering Science with Emphasis in Computer Design.

Continuing Education: Analog Circuit Design, Fuzzy Logic, Python, BASH scripting and regular expressions

Professional Engineer in the Commonwealth of Pennsylvania

## EXPERIENCE

Independent Contractor through Farnsworth Engineering Services. February 1999 to present.

Design and development of programmable speech timer based on Arduino development board using C programming language. Schematic, Guide to Operations and flowcharts created as documentation. May 2014-May 2017.

Cell Phone Express/Point Pleasant Sales: Hired to provide customer database for cellular phone retail store, and stayed on to assist in retail sales and service, customer support, and marketing. Business switched in 2005 from retail store to Internet, and responsibilities changed to designing HTML code for business Web site and eBay advertisements. Summer 2004 to Spring 2006.

Gimpel Software: Acted as engineering technical support person for the popular pc-lint program, reviewing customer feedback and deriving the code changes needed to implement fixes. pc-lint is a very large C-language program. June, July 2003.

GAI-Tronics Corporation: Designed assembly language firmware for two processor modules that are part of an industrial public address system alarm management device. Design documentation provided. August 2000 to February 2001.

Uniphase Telecommunications Products: Developed synchronous serial interface firmware and protocol for communication between dual-processor fiber amplifier rack-mount product. Wrote interface document. September 1999 to November 1999.

Marconi Aerospace (formerly AEL): Update of the Band 9/10 Test Requirements Documents that I wrote for AEL in 1996 (see Band 9/10 description below). Also updated TRD that is used for the entire transmitter. February 1999 to July 1999.

Independent Contractor, February 1997 to June 1998.

ATx Telecom Systems: When the Optical Communications Division of AEL was sold to ATx Telecom Systems, I directly contracted with them to continue work on the optical transmitter. Responsible for redesign of microcontroller and display cards, developing schematics, overhauling firmware and producing owner's manual.

Staff Consultant, AEL Industries, Inc., Montgomeryville, Pa.

Band 9/10: Wrote Test Requirements Documents that define fault isolation techniques to be used to find faults on digital, servo/analog, and power supply circuit cards by analyzing schematics and interfacing with design engineers.

Ground Jammer Training Set: Designed and developed FORTRAN software to perform fault isolation on a RADAR training system. Heavy involvement with military documentation and specifications.

Automatic Test Station: Developed software package, written in Microsoft QuickBASIC, to run tests on IBM PC-based system utilizing IEEE-488, RS-232, and parallel I/O interfaces. Package provides tool set to generate and execute tests. Generated all documentation.

Modulation Recognizer: Responsible for software design effort for a system which determines modulation type of a received signal. Signal generation software developed for a HP PC interfaced to a HP arbitrary waveform generator. Generated user's manual.

### INTERESTS

Music, church, Toastmasters, Sudoku, crossword puzzles, reading.

### CONTACT INFORMATION

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