# PAUL H. FROEHLE

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# **SUMMARY**

Computer programmer with 20+ years of experience in data acquisition and information organization and retrieval. Experience in computer systems management and training. Languages include Fortran, C, Basic, html, php, MySQL, perl, csh, and bash. Expertise in converting old codes to run on new systems.

#### PROFESSIONAL EXPERIENCE

#### **RETIRED . . . 2003 - Present**

- Create websites for ANL to display and plot historic data from old experiments using Apache web server, Mysql, and perl. This included documents in PDF format that were part of the history of the experiments.
- Create and manage the following websites

http://froehle.info

http://www.lemonthistorical.org

http://lemontumc.org

http://www.smsi.org

- Fix Windows systems including network setup, system updates, virus, spam and spyware removal and protection.
- Setup new systems and transfer all the data from the old systems, including installing old software and device drivers.
- Teach people how to use their computers to do what they want them to do
- Converted large FORTRAN code from SunOS to MS Visual Fortran for ANL.
- Work at the Lemont United Methodist Food Pantry

# **ARGONNE NATIONAL LABORATORIES (ANL), Argonne, IL... 1982-2003**

Scientific Associate Engineering Specialist (1995-2003)

- Helped create a Linux cluster of 80 machines to run parallel applications using MPI and in particular Star-CD.
- Created a Linux secure web server and created the web sites http://www.era.anl.gov and http://www.rae.anl.gov.
- Created AI training program to use data from a Matec Ultrasound unit to determine flaws in steel.
- Merged MAAP and DIF3D into a 2 computer parallel code for the Sun machines using MPI.
- Developing system for electronic transfer of FCF data from ANL-W to ANL-E.
- Acted as substitute system administrator for division Suns and PCs.
- Serving as computing consultant for division personnel, handling problems with SunOS, Windows, WordPerfect, Word, Excel, PowerPoint, Access, Paint Shop Pro, Acrobat, World Wide Web applications (NSCSA Mosaic, Netscape, Internet Explorer), dial up and hardware Internet connections.
  - Evaluating and developing the tools and expertise to implement Windows-95 division wide, including applications for network organization.

Scientific Associate, Reactor Engineering Division (1982-1995)

- Evaluated and developed a system to tie PCs and Suns together with the Internet.
- Programmed models for robotic glove simulation project.
- Setup computerized scheduling for part of the FCF and TREAT scheduling for M8.
- Developed data collection and analysis systems using Metrabyte A-D and D-A modules for valve tests, transient thermal anemometer, and level probe projects.
- Developed system for creating and displaying event trees and fault trees.
- Programmed system for tomographic visualization using neutron radiographs.
- Programmed data analysis system of programs to collect, store, display, graph and analyze data from TREAT reactor test including transfer of data between Chicago and Idaho.

# OTHER RELEVANT EXPERIENCE

#### **ARGONNE LABS, Argonne, IL**

Scientific Assistant, Nuclear Engineering Division & Materials Science Division

# APACHE ELECTRONIC SYSTEMS, INC., Oakbrook, IL

Software Consultant, Systems Analyst and Interface Specialist

- Made recommendations on equipment and interfacing to micro-computers.
- Wrote MINIMAX a banking asset/liability assessment program.
- Wrote color graphics driver systems for real-time display and modification of images.

# PROFESSIONAL SOCIETY ACTIVITIES

Member of Sigma Xi,

# **EDUCATION**

BS, Physics, St. Procopius College (Now: Benedictine University), Lisle, IL Had enough credits for a BS in Mathematics