

Patrick M. Mills

500 South Adams Street, Annex B
Arlington, VA 22204
Voice: (571) 338-4657, Fax: (703) 920-0407
pmills@ieee.org

Capabilities Statement

Programming – over 20 languages known; the following are most frequently used

- C – 19 years experience, many commercial applications
- 6811 Assembly – 18 years experience, 2 papers, 3 robots, 1 product
- C++ – 17 years experience, 3 commercial applications
- HTML – 15 years experience, 65+ commercial websites – DHTML, CSS, JavaScript
- Perl – 14 years experience, over 45+ website backends
- Java – 13 years experience, web-based applications
- SQL – 12 years experience with SQL92, Postgres, SQL Server, Sybase, Oracle, and MySQL in E-Commerce
- XML – 11 years experience with Expat, SAX, MSXML; 17+ AJAX applications
- Flash – 10 years experience, numerous website utilities, ActionScript 1 - 3
- C# – 8 years experience, 1 academic product, 1 animated game, 3 website backends, numerous automation and database solutions

Multimedia

- Graphics – 18 years experience using Freehand, Fireworks, Photoshop, Paint Shop Pro, Illustrator, and Painter to create print and web graphics.
- Audio – 16 years experience using Adobe Audition/Cool Edit Pro and Cakewalk to generate Wave, MPEG, Real Audio, Windows Media, and AIFF.
- Video – 13 years experience using Premiere, Flash, Windows Media Encoder, Ultra Converter, TMPGEnc, GSpot, RealProducer, and AviSynth to generate MPEG 2 DVD, MPEG 4, AVI, Real Media, QuickTime, and DivX.

Systems Administration

- Administration – 18 years experience managing and administering computer networks.
- Networking – 11 years experience planning and installing physical computer network cabling.

Computer Aided Design

- Modeling – 8 years experience engineering modeling with Ansys, SolidWorks, COSMOS, Mathematica and MATLAB.
- Design – 8 years experience designing printed circuit boards using Cadence OrCAD.

Platforms

- Wireless – Palm Pilot, Blackberry, Windows CE, WiFi, RFID, Embedded
- Embedded – Intel 80x86, Motorola 680x0, 6812/6811/6809, Renesas, Amtel, Zilog
Ethernet, USB, Sensor Networks
- Prototyping – Xilinx FPGA, Cadence, SolidWorks, Ansys, FEMLab
- MEMS – device design using MEMS Cap, Tanner, IntelliSuite
- Security / Encryption – SSL, SSH, SLeay, SMIME, PKCS
- Multi-Threading – Windows Threads, MMX/SSE, pThreads, MPI
- Intelligent Systems – Fuzzy Logic, Neural Networks, Genetic Algorithms
- Graphics – DirectX / Direct3D, Shaders, OpenGL, custom 2D / 3D

Architectures

- Windows 95/98/ME/NT/2000/XP/2003/Vista/2008/7/CE
- Unix – Linux, BSD, Solaris, Ultrix, HP/UX
- Macintosh – OS 6 – OS X

Management

Over 16 years experience. Manage a team of programmers, developers and artists; manage clients' expectations and budgets. Balance time, cost, functionality, and reliability.