

# Patrick M. Mills

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## Capabilities Statement

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

- C – 20 years experience, many commercial applications
- 6811 Assembly – 19 years experience, 2 papers, 3 robots, 1 product
- C++ – 18 years experience, 3 commercial applications
- HTML – 16 years experience, 65+commercial websites – DHTML, CSS, JavaScript
- Perl – 15 years experience, over 45+ website backends
- Java – 14 years experience, web-based applications
- SQL – 13 years experience with SQL92, Postgres, SQL Server, Sybase, Oracle, and MySQL in E-Commerce
- XML – 12 years experience with Expat, SAX, MSXML; 17+ AJAX applications
- Flash – 11 years experience, numerous website utilities, ActionScript 1 - 3
- C# – 9 years experience, 1 academic product, 1 animated game, 3 website backends, numerous automation and database solutions

## Multimedia

- Graphics – 19 years experience using Freehand, Fireworks, Photoshop, Paint Shop Pro, Illustrator, and Painter to create print and web graphics.
- Audio – 17 years experience using Adobe Audition/Cool Edit Pro and Cakewalk to generate Wave, MPEG, Real Audio, Windows Media, and AIFF.
- Video – 14 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 – 19 years experience managing and administering computer networks.
- Networking – 12 years experience planning and installing physical computer network cabling.

## Computer Aided Design

- Modeling – 9 years experience engineering modeling with Ansys, SolidWorks, COSMOS, Mathematica and MATLAB.
- Design – 9 years experience designing printed circuit boards using Cadence OrCAD.

## Platforms

- Wireless – WiFi, RFID, Embedded
- Embedded – Intel 80x86, Motorola 680x0, 6812/6811/6809, Renasas, 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, SSLeay, 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

- Mobile – Android, iPhone/iPad/iTouch, Blackberry, Palm Pilot, Windows CE
- Windows – 7/Vista/2008/2003/XP/2000/NT/ ME/98/95/3.1
- Unix – Linux, BSD, Solaris, Ultrix, HP/UX
- Macintosh – OS X – OS 6

## Management

Over 17 years experience. Manage a team of programmers, developers and artists; manage clients' expectations and budgets. Balance time, cost, functionality, and reliability.