# Resume for Peter Glen

I am a **Senior** Software Engineer, worked most of my life in the Computer Software industry. I traversed thru the stages of low level software, OS, Firmware, Device Drivers, some Hardware … all the way to high level languages. I arrived to the topographic point in programming, where voice recognition research, compiler writing and code research filled my workload. Lastly, I entered the world of neural network research.

I programmed mainly in C and C++ and Python. Also created significant output in several other languages including; Java, Basic, Perl, PHP, and Assembler; for multiple platforms. With 25+ years of experience, I worked extensively with version control, project management, testing and debugging. In the course of my career I have discovered that I am a natural problem solver, logical thinker, and I excel in difficult situations. I have a great grasp on mathematics, and I am a natural algorithmic thinker.

As a highlight, I invented / created a new medical image processing algorithm which was successfully executed as an official US patent.

My most recent experience involved contract programming with various clients. The focal point of contracts where C / C++, Python and large data sets. For example I created a data plot for 125 years of temperature data from an NOAA data dump. Another example is a shape recognition primitive. Written in python, with 'C' modules supporting it.

Before that, I created a Linux Distribution, called *Community Linux*. The distribution lives on a USB drive, and has full hard drive speed and features. It is open sourced, and can be found on Source Forge dot com. In connection with that I created some Linux drivers. A text parser for fast text display, and a host of other utilities. In creating a Linux distro, I touched on every aspect of the code from drivers to high level.

Previously to that, I wrote a couple of Android applications. The principal app is AnyStep, a step counter / pedometer. The gravity sensor's output is interpreted with a DSP algorithm. (Which I created and published.) This app was titled by a leading university study as the most accurate in its category.

I worked in the voice-recognition field, created a new state-of-the-art analysis and recognition method. Before that, I authored a graphical medical application for surgery design and drawing. The software was well received in the medical community, and the X-Ray annotation feature made it the most desirable in its category. In the course of the development of this program I authored an official US patent, which is referenced by the top five (major) companies like Intel, Apple, Microsoft … and has several dozen other references.

**Achievements:**

- Inventor / Author of Alpha Blending Patent (Official United States Patent, #20070103483)
- Developer of a new state of the art voice recognition algorithm (Wave Frag)
- Author / Developer of Several Android applications (AnyStep AndReader)
- Consultant in founding / incubating a new energy company
- Developer for a DSP emulation board device driver for Texas Instruments
- Author / Developer of several software applications for the Win32 platform
- Co-Founder / Lead Developer of Medical Software company
- Author / Lead Developer for Medical Software Surgery Drawing / Annotation (XNCPT)
- Developer / Project Lead for several Device Drivers for Windows and Linux / Solaris
- Developer and architect of several encryption algorithms (ex: BluePoint)
- Author and proprietor of Global Medical Data Sharing Software (XrayNotes)

Among my achievements, I co-founded a software company for a Medical Software Application and Image Annotation Application. Headed its development division until product release. Then I founded a Software Research Company, that produced a new Voice Recognition algorithm. The algorithm works on a newly invented principle, representing a breakthrough in Spectral Analysis, Voice Recognition and Voice Identification.

I have extensive experience with Open Source software. In the early stages, I was involved in the Linux Kernel development. I possess significant background in Mathematics, Electronics, Digital Signal Processing, and Algorithm Development. Proven track record in leading small to mid sized teams with emphasis on results, mentoring, good communication, and creating harmonious working environment.

**Software Experience:**

- Languages: C++ Visual C++, C, PHP, Python, Java.
- Secondary Languages/Tools: Perl, Python, Visual Basic, Bison, LEX, YACC, Assembler.
- Operating systems: Windows / Android / Linux / Solaris / OSX
- Android Development (Active Apps on Google – AnyStep - ).
- Databases: SQL, My SQL, Access, FFDB.
- Networking protocols: FTP, POP3, SMTP, HTTP, SDTP, TCP/IP.
- Device Driver Development for Windows, Solaris, Linux, Android.

**Research**:

- Algorithm development for audio analysis and voice recognition.
- Mathematical foundation for new generation sound/image analysis.
- Encryption methodologies research, crypt analysis.
- Operating system methodologies research / development.
- Algorithm development for modern video compression methods.
- Medical data sharing related research, balancing privacy / access. (see: XrayNotes)
- Image recognition – Shape Recognition primitive. (see: Linkedin Page)

**Education:**

- Electronic Science Degree (Physics Sub Chapter).
- City and Guilds, 'A' listed.
- IEEE 15th Edition RG, Kent.
- BTEC National Certificate, Canterbury.
- Microelectronics Certificate, London (UK).
- PhD level programming experience, practical equivalence. (US)

**Publications:**

- How to beat the Super Computer. Article about Hashing.
- The Blue Point Encryption Algorithm and its Cipher Analysis.
- Balance of the Universe. (Physics … Spirituality)
- Publications relating to software's cross sector interaction. (Medicine / Dental / Engineering)
- Medical journal article on software development. (Dental Surgery / Feasibility / Cost Analysis)

**Experience Timetable:**

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|---|---|---|---|---|---|
| C++ | 15+ Years | Python | 2+ Years | C<br>C99, ANSI C MSC | 20+ Years |
| Win32 Application Development | 8+ Years | Medical Software Development | 5 Years | Unix / Linux / Solaris Development | 5 Years |
| PHP | 2 Years | Perl/Python/ Bash/ASM | 5 Years | Software Algorithm Research | 3+ Years |
| Android | 2 Years | Linux Kernel Hacking | 3- Years | Device Driver Development | 3+ Years |
| Voice Recognition | 2 Years | System Administration | 2+ Years | DSP Research | 2 years |

**Experience / Work History:**

*Contract Programmer, Venice Florida, USA 2016 to present*

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| *Position:* | Contractor, Developer. (Description in text above.) |
| *Involved technologies:* | *C,* C++, Python, Assembler |
| *Year / Duration:* | *2016 ... ongoing* |

*Community Linux – Linux Development:*

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|---|---|
| *Position:* | *Creator*, Developer. (Description in text above.) |
| *Involved technologies:* | C++, Bash, Python, Perl |
| Year / Duration: | 2013 … 2016 |

*AnyStep - Android Development:*

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|---|---|
| *Position:* | Founder, Developer. (Description in text above.) |
| *Involved technologies:* | *JAVA,* C++, Android API, Google API, DSP, Math. Map API |
| Year / Duration: | 2012 1+ years |

*RMS - Research Position, Founder*

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|---|---|
| *Position:* | Research Engineer, Inventor for RMS (RobotMonkeySoftware) The product is a new software algorithm for voice recognition. The algorithm is simpler, less processor intensive than existing ones. |
| *Involved technologies:* | *Win32,* C++, MFC, DSP, Math, Portable to mobile platforms. |
| Year / Duration: | 2009 / 2+ years, |

*XrayNotes: Software Development, Software Enterprise (XNT)*

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|---|---|
| *Position:* | Founder. The product is a global medical data sharing software suite that tackles the challenges of medical data availability versus the need for privacy and data safety. |

*Involved technologies:* *Win32,* C++, Blue Point, MFC, DSP, DICOM. Level7
Year / Duration: 2008 / 2+ Years

*Except (LLC):*

*Position:* Co-Founder of a new Medical / Dental software company. The software was developed for surgery design and documentation. Software Development / Management.
*Involved technologies:* *Win32,* C++, Unix GUI, Limited Apple X Code,
Year/Duration: 2005 / 2 Years

*Multiple Clients:*

*Position:* Contract Programming, Serving multiple clients with misc. programming tasks. Client list includes local Newspaper Organizations, Satellite TV Company, Medical Offices, Hospitals.
*Involved technologies:* *Win32,* C++, GUI, PHP, HTML, CGI, JavaScript, Linux Administration
Year/Duration: 2001/ 4 Years

*Texas Instruments:*

*Position:* Contractor for multiple consecutive projects for the DSP chip emulation board project. The positions involved writing the DSP interface's device drivers for Windows, Linux, Solaris.
*Involved technologies:* Win32, DSP, C, C++, Linux, DMA, IRQ, I/O, Device Drivers,
Year/Duration: 1999/ 2 Years

Details reaching back further in time are omitted for brevity, and it is available on request. Companies: MARX international, TI (Texas Instruments), SAM (Software Artists Munich) Megger Instruments, and more ...

*Contact Information:*

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