



# Open Source Licensing of AnIML

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**Toronto, Canada**

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# Agenda

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- What is Open Source Software
- Degrees of Open Source
- Is the AnIML Standard Open?
- ASTM Standards Licensing Overview
- AnIML XML Schema Licensing
- Using AnIML in Open and Closed Source Products
- AnIML Tools Project

# What is Open Source Software?

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*Open source is a development method for software that harnesses the power of distributed peer review and transparency of process.*

Opensource.org

- No royalties or licensing fees
- Access to the source code

# Open Source Examples

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# Common Concerns

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- The amount of freedom in Open Source Software is set in the license

*I don't know which license to use, there are too many options*

# Too Many Options?

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"><li>• Academic Free License 3.0 (AFL 3.0)</li><li>• Affero GNU Public License</li><li>• Adaptive Public License</li><li>• Apache License, 2.0</li><li>• Apple Public Source License</li><li>• Artistic license 2.0</li><li>• Attribution Assurance Licenses</li><li>• New and Simplified BSD licenses</li><li>• Boost Software License (BSL1.0)</li><li>• Computer Associates Trusted Open Source License 1.1</li><li>• Common Development and Distribution License</li><li>• Common Public Attribution License 1.0 (CPAL)</li><li>• Common Public License 1.0</li><li>• CUA Office Public License Version 1.0</li><li>• EU DataGrid Software License</li><li>• Eclipse Public License</li><li>• Educational Community License, Version 2.0</li></ul> | <ul style="list-style-type: none"><li>• Eiffel Forum License V2.0</li><li>• Entessa Public License</li><li>• Fair License</li><li>• Frameworkx License</li><li>• GNU General Public License (GPL)</li><li>• GNU General Public License version 3.0 (GPLv3)</li><li>• GNU Library or "Lesser" General Public License (LGPL)</li><li>• GNU Library or "Lesser" General Public License version 3.0 (LGPLv3)</li><li>• Historical Permission Notice and Disclaimer</li><li>• IBM Public License</li><li>• ISC License</li><li>• Lucent Public License Version 1.02</li><li>• Microsoft Public License (Ms-PL)</li><li>• Microsoft Reciprocal License (Ms-RL)</li><li>• MIT license</li><li>• Motosoto License</li><li>• Mozilla Public License 1.1 (MPL)</li><li>• Multics License</li><li>• NASA Open Source Agreement 1.3</li><li>• NTP License</li><li>• Naumen Public License</li><li>• Nethack General Public License</li></ul> | <ul style="list-style-type: none"><li>• Nokia Open Source License</li><li>• Non-Profit Open Software License 3.0 (Non-Profit OSL 3.0)</li><li>• OCLC Research Public License 2.0</li><li>• Open Group Test Suite License</li><li>• Open Software License 3.0 (OSL 3.0)</li><li>• PHP License</li><li>• Python license (CNRI Python License)</li><li>• Python Software Foundation License</li><li>• Qt Public License (QPL)</li><li>• RealNetworks Public Source License V1.0</li><li>• Reciprocal Public License 1.5 (RPL1.5)</li><li>• Ricoh Source Code Public License</li><li>• Simple Public License 2.0</li><li>• Sleepycat License</li><li>• Sun Public License</li><li>• Sybase Open Watcom Public License 1.0</li><li>• University of Illinois/NCSA Open Source License</li><li>• Vovida Software License v. 1.0</li><li>• W3C License</li><li>• wxWindows Library License</li><li>• X.Net License</li><li>• Zope Public License</li><li>• zlib/libpng license</li></ul> |
|---|--|--|

# Degrees of Open Source

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- Open Source licenses state the degree of freedom the author permits users of their software
- We will look at three levels of freedom
  - GPL license
  - LGPL license
  - BSD license

# GPL License

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- General Public License (GPL)
- Most widely used license for Open Source Software
- Ensures that the software retains its freedom

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**Cannot be used in proprietary/commercial software**

# LGPL License

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- Lesser General Public License (LGPL)
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- Berkley Software Distribution (BSD)
- Provides the most amount of flexibility among the licenses
- License contains two restrictions
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**Can be used in proprietary/commercial and GPL software**

# AnIML Standard Open?

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- Is the AnIML Standard Open, as in Open Source?
  - **No**, AnIML is a standard, not a software component
- Is the AnIML Standard Open, as in Accessible?
  - **Yes!** AnIML formatted files are human readable

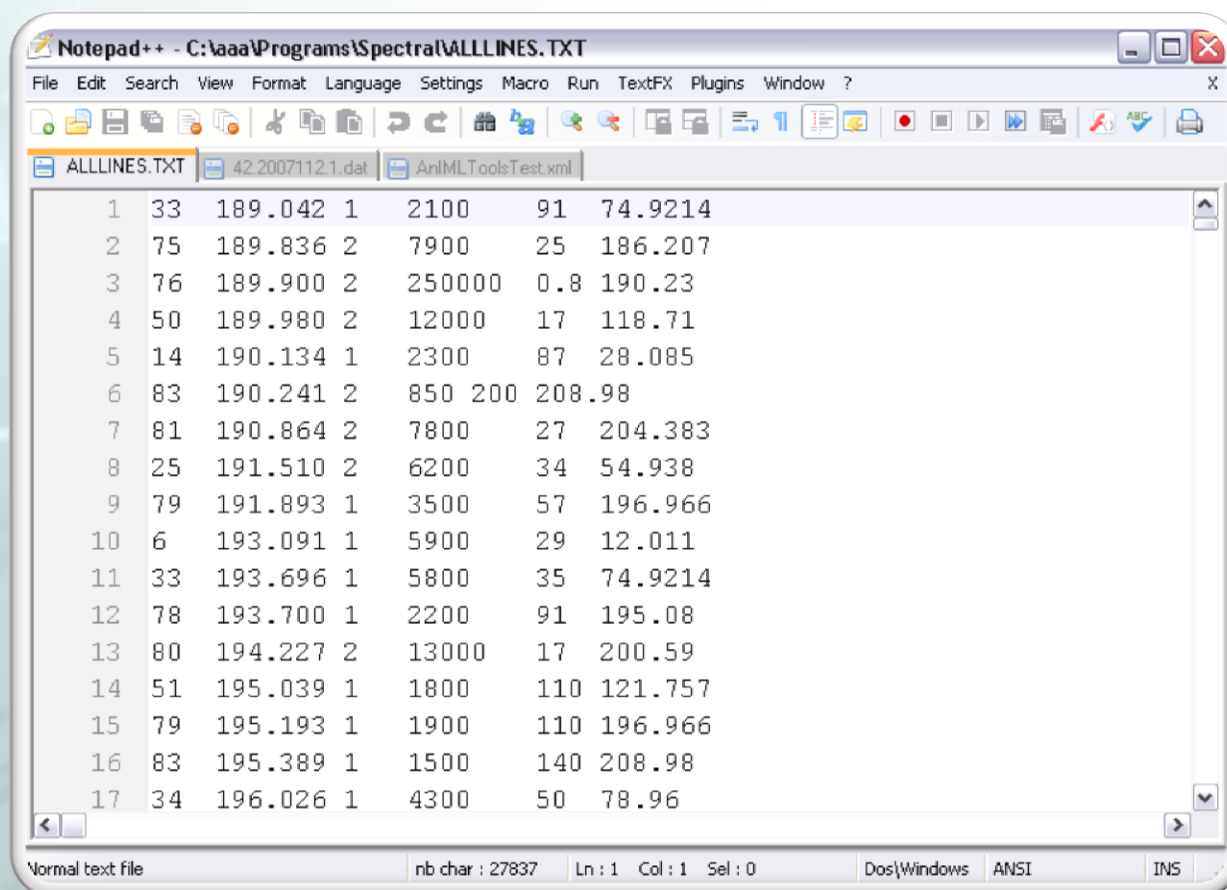
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- Is the AnIML Standard Open, as in Accessible?
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*The success of a new data standard is dependent on the ability of the data to be accessible to everyone.*

# Accessible Data?



Notepad++ - C:\aaa\Programs\Spectral\ALLLINES.TXT

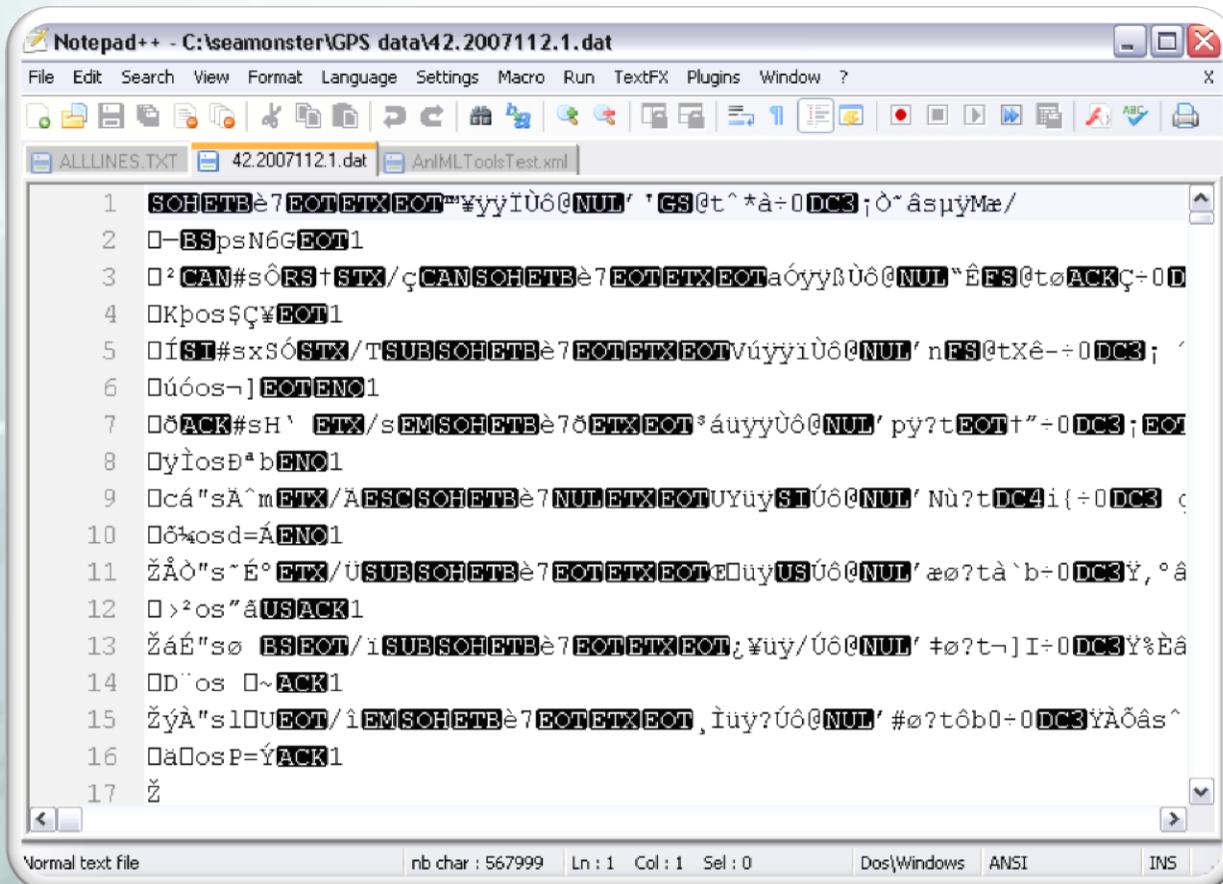
File Edit Search View Format Language Settings Macro Run TextFX Plugins Window ?

ALLLINES.TXT 42.2007112.1.dat AnMLToolsTest.xml

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2	75	189.836	2	7900	25	186.207	
3	76	189.900	2	250000	0.8	190.23	
4	50	189.980	2	12000	17	118.71	
5	14	190.134	1	2300	87	28.085	
6	83	190.241	2	850 200	208.98		
7	81	190.864	2	7800	27	204.383	
8	25	191.510	2	6200	34	54.938	
9	79	191.893	1	3500	57	196.966	
10	6	193.091	1	5900	29	12.011	
11	33	193.696	1	5800	35	74.9214	
12	78	193.700	1	2200	91	195.08	
13	80	194.227	2	13000	17	200.59	
14	51	195.039	1	1800	110	121.757	
15	79	195.193	1	1900	110	196.966	
16	83	195.389	1	1500	140	208.98	
17	34	196.026	1	4300	50	78.96	

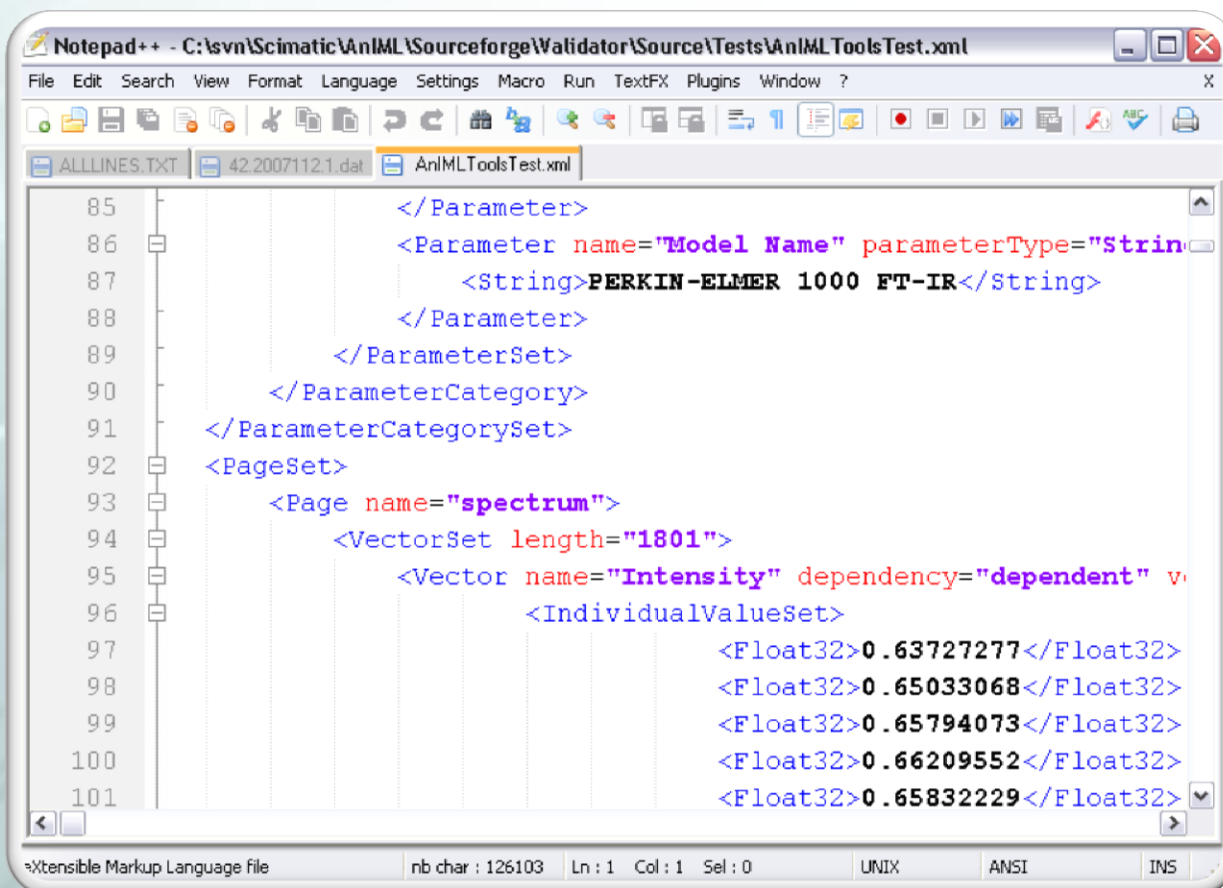
Normal text file nb char : 27837 Ln : 1 Col : 1 Sel : 0 Dos\Windows ANSI INS

# Accessible Data?



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2 □-BSpsN6GEOT1
3 □²CAN#sôRS+STX/çCANSOHEtBè7EOTETXEOTaóyyßÙô@NUL"ÊFS@tøACKÇ÷0D
4 □Kpos$Ç¥EOT1
5 □íSI#sxsóSTX/TSUBSOHETBè7EOTETXEOTvúyyiÙô@NUL' nES@tXê÷÷0DC3; '
6 □úóos~]EOTENO1
7 □ôACK#sH' ETX/sEMSOHETBè7ôETXEOT*áuyyÙô@NUL' py?tEOT+÷÷0DC3;EOI
8 □yÿosB*bENO1
9 □cá"sÄ^mETX/ÄESCSOHEtBè7NULETXEOTUYüySIÚô@NUL' Nù?tDC4i{÷0DC3 c
10 □ô%osd=ÄENO1
11 ŽÄò"s~É°ETX/ÜSUBSOHEtBè7EOTETXEOTEOüyUSÚô@NUL' æø?tà`b÷0DC3ÿ,°â
12 □>²os"äUSACK1
13 ŽáÉ"sø BSEOT/iSUBSOHETBè7EOTETXEOT;¥uy/Úô@NUL' #ø?t~]I÷0DC3ÿ%Èä
14 □D"os □~ACK1
15 ŽýÀ"s1□UEOT/iEMSOHETBè7EOTETXEOT,ÿuy?Úô@NUL' #ø?tôb0÷0DC3ÿÄôâs^
16 □ä□osP=ÝACK1
17 Ž
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# Accessible Data!



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86         <Parameter name="Model Name" parameterType="String">
87             <String>PERKIN-ELMER 1000 FT-IR</String>
88         </Parameter>
89     </ParameterSet>
90 </ParameterCategory>
91 </ParameterCategorySet>
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93     <Page name="spectrum">
94         <VectorSet length="1801">
95             <Vector name="Intensity" dependency="dependent" values="dependent">
96                 <IndividualValuesSet>
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Extensible Markup Language file    nb char : 126103    Ln : 1    Col : 1    Sel : 0    UNIX    ANSI    INS

# ASTM Licensing Overview

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- ASTM is the licensing body responsible for publishing the AnIML standard
- Standards do not use not open source licenses
- Standards are not free



Back to [Molecular Spectroscopy and Separation Science Standards](#)

## ASTM E1578 - 06

### ASTM E1578 - 06 Standard Guide for Laboratory Information Management Systems (LIMS)

Active Standard ASTM E1578 Developed by Subcommittee: [E13.15](#) | Book of Standards Volume: 03.06

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# ASTM License Agreement

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[www.astm.org/msgs/license\\_astm.htm](http://www.astm.org/msgs/license_astm.htm)

- Ownership – Standards are copyrighted by ASTM
- Various Licensing schemes – Individual users, single & multi-site licenses
- Right to browse, search, retrieve, display and view the Product
- Standard copyright agreement

# AnIML XML Schema

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- The AnIML Schema is a supplement to the standard
- The AnIML Schema is an XML schema document which lays out the AnIML formatting rules
- Possible to implement AnIML aware software with the schema alone

# AnIML XML Schema

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- ASTM has made a commitment to ensure that the AnIML Schemas are made freely available
- Obtaining the actual standard does cost money but access to the actual *blueprint* of AnIML is free
- There are no licensing fees or royalties to integrate AnIML into your application
- Similar scenario to using HTML or XML

# Adhering to the Standard

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- There needs to be a method to ensure that files that claim to adhere to the standard can be verified
- This is the role of the AnIML validation software that will be supplied by ASTM
- To claim a file is AnIML compliant it must be able to pass the validation process

# Using AnIML in Products

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- There are no restrictions in implementing support for AnIML formatted files in your applications
- AnIML support can be used in
  - Open Source software (even GPL licensed software)
  - Commercial software

# Why We Support Open Source

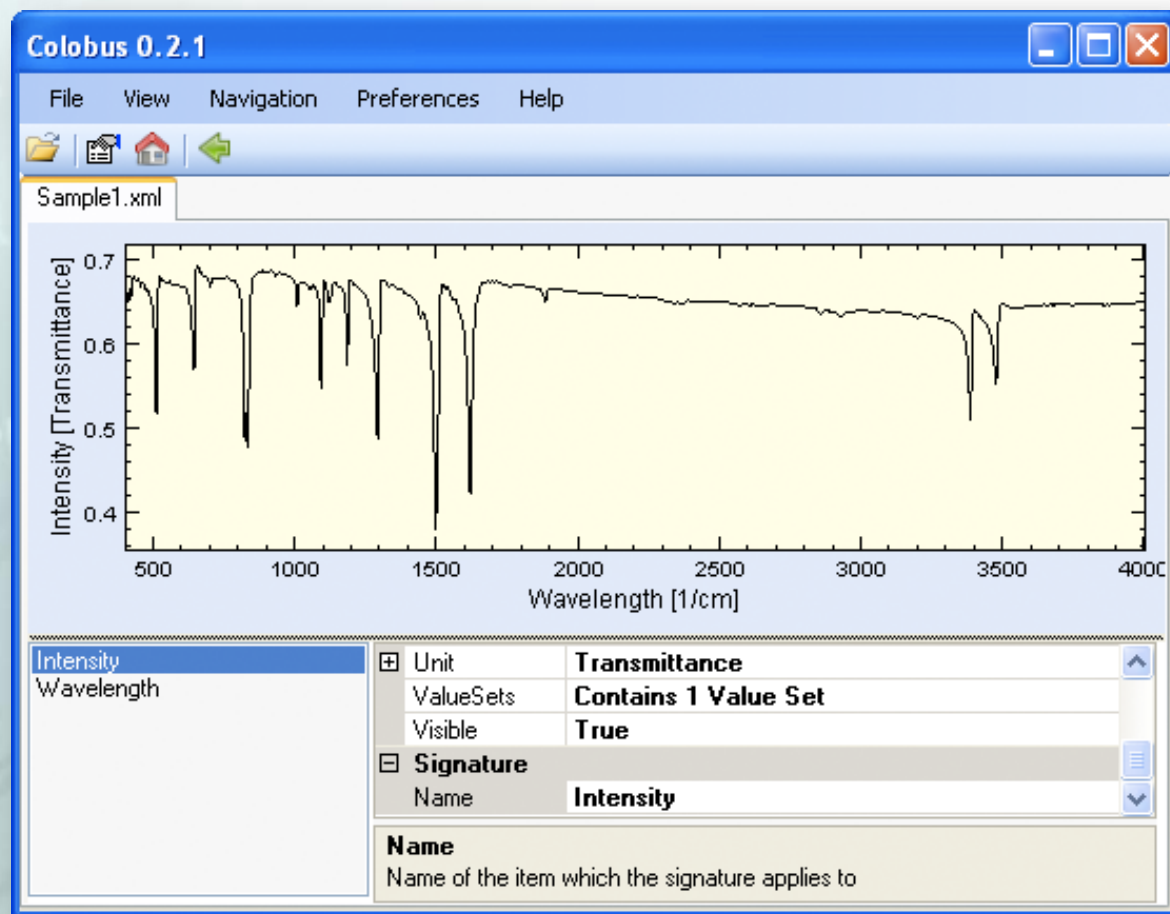
- Why re-invent the wheel over and over again
- We are a solutions company (not a products company)
- Modern day advertising, allows potential clients to evaluate our work without any NDA related issues
- Doing our part to promote the AnIML standard

# AnIML Tools Project

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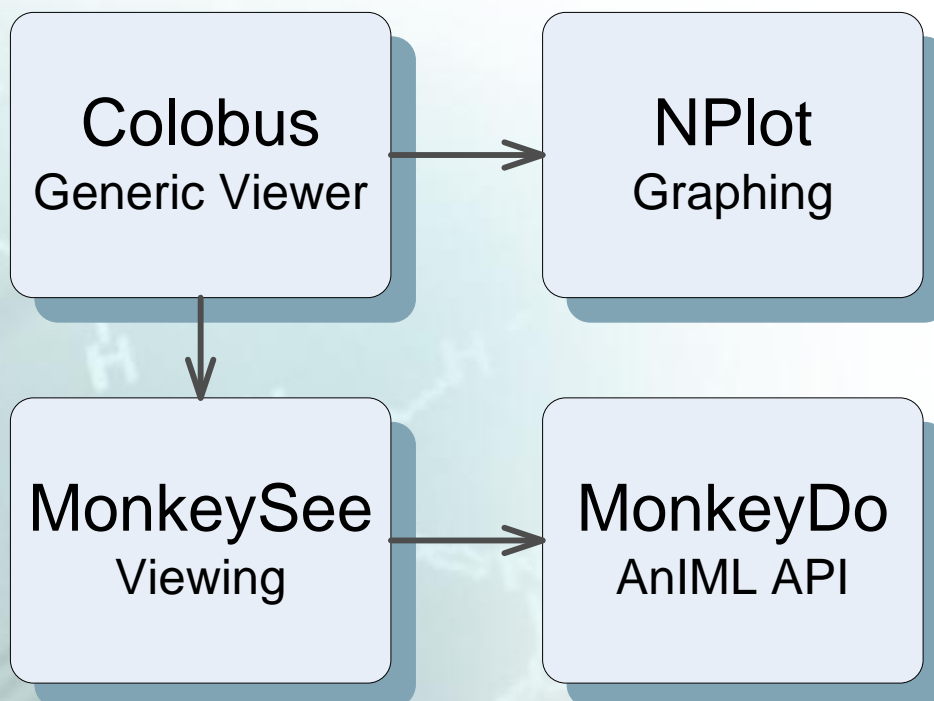
- Open Source components (C#, Microsoft .Net) for AnIML
- First Open Source .Net solution available
- Hosted on Sourceforge
- LGPL licensing (can be used in commercial products)

# AnIML Tools Project



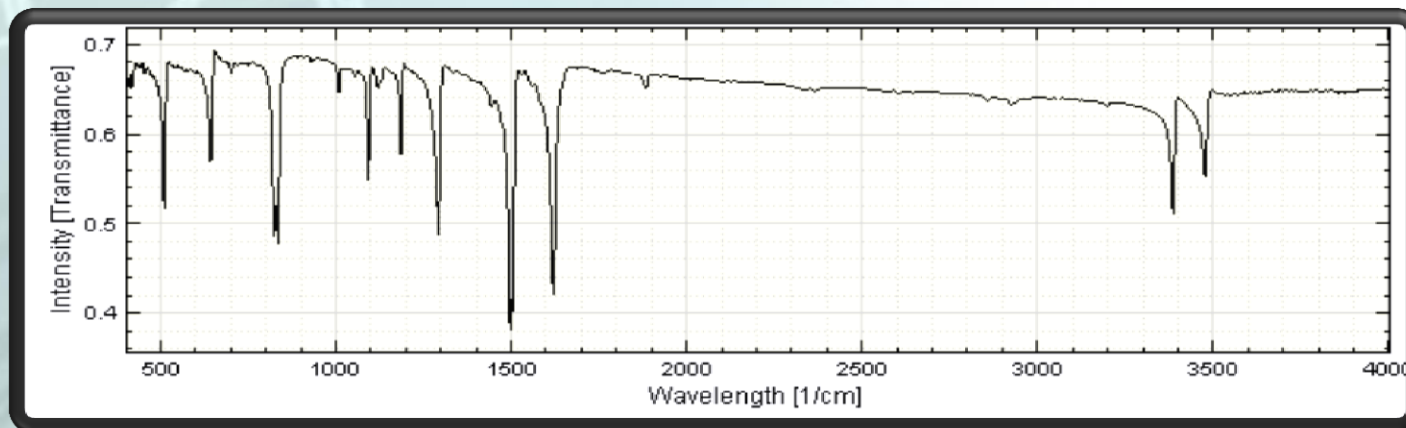
# AnIML Tools Project

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# NPlot

- Popular Open source charting library (over 33,000 downloads)
- Why we choose NPlot:
  - We administrator the project
  - Used in several client projects



# Getting Involved

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*Open Source software is community built software*

We are always looking for:

- Software developers – C# knowledge with time to donate?
- Feedback – Is this software useful for your company?

# Questions?

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AnIML Project	<a href="http://animl.sourceforge.net">animl.sourceforge.net</a>
ASTM	<a href="http://www.astm.org">www.astm.org</a>
AnIML Tools	<a href="http://www.animltools.com">www.animltools.com</a>
NPlot	<a href="http://www.nplot.com">www.nplot.com</a>
Scimatic Software	<a href="http://www.scimatic.com">www.scimatic.com</a>

Jamie McQuay

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