

This SignalPop Service and License Agreement (the “Agreement”) is entered into by and between SignalPop LLC, a Delaware limited liability company (“SignalPop”), and you, the customer (“Customer”, “you” or “your”). Your use of the SignalPop “Services”, “Software”, or “Documentation” (as defined below) is governed by the terms and conditions of this Agreement (the “Terms”). In order to use the SignalPop Services, Software, or Documentation, you must first agree to the Terms, and by actually using the SignalPop Services, Software, or Documentation, you are thereby agreeing to the Terms. You understand and agree that SignalPop will treat your use of the SignalPop Services, Software, or Documentation as acceptance of the Terms and therefore agree to the following:

**I. Definitions**

- a. “Software” means object code versions of the SignalPop software products, excluding any Open Source Components, but including SignalPop AI Designer and SignalPop AI Server.
- b. “Documentation” means the documentation made available electronically as part of the Software or provided by SignalPop related to the Software.
- c. “Services” means services provided by SignalPop’s employees, contractors, and/or its or their affiliates to you.
- d. “Integrating Application” means a software solution that incorporates the Software with other software applications.
- e. “Open Source Licenses” means public licenses approved by the Open Source Initiative as “open source licenses”. The Apache License, Version 2.0, and the MIT License are Open Source Licenses.
- f. “Open Source Components” means software components licensed under Open Source Licenses, which have their own copyright and applicable license conditions.

**II. License**

- a. License Grant – Subject to the Terms of this Agreement and upon first using the Software, purchasing a product license key, or joining a beta program, SignalPop grants to you a non-exclusive, non-transferable, limited, subscription based license during the term of this Agreement solely to:
  - i. Install and use the Software in object code form, solely for your internal testing, development, and business purposes, subject to Sections III.b (Open Source) and III.c (License Restrictions) below;
  - ii. Copy and incorporate the software into an Integrating Application; and
  - iii. Use and copy the Documentation.
- b. Open Source – Copies of the Software may contain Open Source Components licensed under the terms of the applicable Open Source Licenses and copyright notices found or referenced in the corresponding license files, Documentation, or other accompanying materials. By agreeing to this Agreement, you are also agreeing to each of the Open Source Licenses referenced below.
- c. License Restrictions – Except as expressly permitted in this Agreement, Customer agrees not to and shall not willingly allow any third party to:
  - i. Sell, rent, assign, publish, lease, license, distribute, sublicense, or otherwise transfer, in whole or in part, any Software or Documentation to a third party.
  - ii. Modify, alter, amend, fix, translate, enhance, or otherwise create derivative works of any Software or Documentation.

- iii. Remove, disable, or otherwise create or implement any workaround to any security features contained within any Software or Documentation.
  - iv. Decompile, disassemble, translate, reverse engineer, or otherwise attempt to derive source code from any Software, in whole or in part, for any purpose whatsoever.
  - v. Allow access to or permit use of any Software by any user other than your employees or authorized third-party contractors who (A) are providing services to you and (B) agree in writing to abide by the terms of this Agreement; provided further that you shall be liable for any failure by any such employee or third-party contractor to comply with this Term of this Agreement;
  - vi. Create, share, develop, license, install, use, or deploy any software (including third party software or services) to circumvent or provide access, permissions, or rights which violate the license keys used by any Software;
  - vii. Change or delete any proprietary rights notices which appear in any Software or Documentation;
  - viii. Use the Software or Documentation for purposes of competitive analysis, the development of any competing product or service, or any other purpose that is to SignalPop's commercial disadvantage.
  - ix. Use the Software or Documentation in violation of any federal, state, or local law, regulation, or rule, including copyright laws.
- d. Expenses Incurred – SignalPop is not responsible for any expenses incurred by you in connection with this Agreement. All fees are nonrefundable and made without right of set-off or chargeback. All amounts not paid when due are subject to a late fee of the lesser of two percent (2%) per month or the maximum amount allowable by law.
- e. Ownership – SignalPop reserves and retains all intellectual property rights not expressly granted by it to you under this Agreement. Other than the licenses granted in this Agreement, SignalPop retains all right, title, and interest in and to the Software and Documentation and all derivatives thereof.

### III. Term and Termination

- a. Term – The term of this Agreement starts on the date you first use the Software or Documentation, the date you purchase a license key, or the date a beta license key is assigned to you, whichever is earlier, and shall continue so long as a license key remains valid for such Software or Documentation. Thereafter, this Agreement will automatically renew for additional periods so long as you hold at least one valid and active license key that you have purchased or that was assigned to you for such Software or Documentation. In the event you have an active, valid license agreement with SignalPop to use any Services, Software, or Documentation and you use a license key that is not a beta license key and that you have not purchased (i.e. a license key obtained from a third party), this Agreement will immediately terminate.
- b. Effect of Termination – Upon the expiration or termination of this Agreement:
- i. All outstanding amounts owed by you to SignalPop under this Agreement will become immediately due and payable, and you agree to pay all such amounts immediately upon such expiration or termination;
  - ii. All licenses under this Agreement will terminate; and

- iii. All SignalPop Services provided or to be provided under this Agreement will terminate;
    - iv. Customer will immediately cease using the Software and Documentation.
  - c. Survival – Sections I (Definitions), III.c (License Restrictions), III.e (Ownership), IV (Term and Termination), and V (Warranties, Disclaimer, and Indemnification) will survive the expiration or termination of this Agreement.
- IV. **Warranties, Disclaimer, and Indemnification**
  - a. Disclaimer of Warranty – **UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING, THE SIGNALPOP SERVICES, SOFTWARE, AND DOCUMENTATION ARE PROVIDED ON AN “AS IS” BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY, QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE, AND WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE. WITHOUT LIMITING THE FOREGOING, SIGNALPOP PROVIDES NO WARRANTY OR UNDERTAKING, AND MAKES NO REPRESENTATIONS OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, THAT SUCH SERVICES, SOFTWARE, OR DOCUMENTATION WILL MEET YOUR REQUIREMENTS, ACHIEVE ANY INTENDED RESULTS, BE COMPATIBLE OR WORK WITH ANY OTHER SOFTWARE, APPLICATIONS, SYSTEMS OR SERVICES, OPERATE WITHOUT INTERRUPTION, MEET ANY PERFORMANCE OR RELIABILITY STANDARDS, OR BE ERROR FREE.** You are solely responsible for determining the appropriateness of using the Services, Software, and/or Documentation, and you assume any and all risks, known and unknown, associated with your exercise of any rights granted by this Agreement.
  - b. Limitations of Liability – You recognize that artificial intelligence is an imperfect science based on probabilities, sparse and imperfect data, and many other unknown risks which may impact the performance of the Services, Software, or Documentation. For these reasons, in no event and under no legal theory, whether in tort (including negligence), contract, at law, in equity, or otherwise, unless required by applicable law or agreed to in writing, shall SignalPop or any of its affiliates (“Affiliates”) be liable to you or any of your customers, clients, partners, affiliates, equity holders, directors, employees, agents, or representatives, or to any third party, for any damages, including any direct, indirect, special, incidental, exemplary, special, punitive, or consequential damages, of any character arising as a result of this License or out of the use of or inability to use any Services, Software, or Documentation (including but not limited to damages for loss of goodwill, work stoppage, computer failure, or malfunction, or any and all other commercial damages or losses, regardless of whether such damages were foreseeable and whether or not SignalPop, you or any of your customers, clients, partners, affiliates, equity holders, directors, employees, agents, or representatives, or any third party were advised of the possibility of such damages).
- V. **General**
  - a. Entire Agreement – This Agreement constitutes the entire agreement between you and SignalPop concerning the use of the Services, Software and Documentation. This Agreement supersedes all prior or contemporaneous discussions, proposals, and

agreements between you and SignalPop relating to the subject matter hereof. No amendment, modification, or waiver of any provisions of this Agreement shall be effective unless in writing and signed by both you and SignalPop.

- b. Severability – If any provision of this Agreement is held to be invalid or unenforceable, the remaining provisions shall remain in full force and effect and such invalid or unenforceable provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed to the extent necessary to make such provision valid and enforceable.
- c. Waiver – No waiver of rights by you or SignalPop may be implied from any actions or failures to enforce your or SignalPop’s rights under this Agreement.
- d. Force Majeure – Neither party to this Agreement shall be liable to the other for any delay or failure to perform due to causes beyond its reasonable control (excluding payment of monies due).
- e. No Third Party Beneficiaries – Unless otherwise specifically stated, the terms of this Agreement are intended to be and are solely for the benefit of you and SignalPop and do not create any right in favor of any third party.
- f. Governing Law and Jurisdiction – This Agreement shall be governed by the laws of the State of Washington, without reference to the principles of conflicts of law. The provisions of the Uniform Computerized Information Transaction Act and United Nations Conventions on Contracts for the International Sale of Goods shall not apply to this Agreement. Any litigation related to this Agreement shall be brought in the state or federal courts located in King County, Washington and only in those courts, and you irrevocably waive any objections to such venue.

#### **VI. Government Regulation**

- a. Export Restrictions – You acknowledge that the Software and Documentation are subject to export restrictions by the U.S. government and import restrictions by certain foreign governments. You may not export or re-export the Software or Documentation except in compliance with the U.S. Export Administration Act and related rules and regulations and similar non-U.S. government restrictions, if applicable. You shall not and shall not allow any third-party to remove or export from the United States or allow the export or re-export of any Software or Documentation or any direct product thereof:
  - i. Into (or to a national or resident of) any embargoed or terrorist-supporting country;
  - ii. To anyone on the U.S. Commerce Department’s Table of Denial Orders or U.S. Treasury Department’s list of Specially Designated Nationals;
  - iii. To any country to which such export or re-export is restricted or prohibited, or as to which the U.S. government or any agency thereof requires an export license or other governmental approval at the time of export or re-export without first obtaining such license or approval; or
  - iv. Otherwise in violation of any export or import restrictions, laws or regulations of any United States or foreign agency or authority.
- b. Customer Assurances – You agree to the foregoing and represent and warrant that you are not located in, under the control of, or a national or resident of any such prohibited

country or on any such prohibited party list. The Software and Documentation are further restricted from being used for:

- i. Terrorist activity; or
  - ii. The design or development of nuclear, chemical, or biological weapons or missile technology without the prior permission of the U.S. government.
- c.** Customer Compliance – You shall at all times comply with all applicable laws and regulations in performing under this Agreement, including without limitation any applicable anti-corruption laws.
- d.** Classification – The Software and Documentation are deemed to be “commercial computer software” and “commercial computer software documentation”, respectively, pursuant to DFAR Section 227.7202 and FAR Section 12.212(b), as applicable. Any use, modification, reproduction, release, performing, displaying, or disclosing of the Software or Documentation by the U.S. government shall be governed solely by the terms of this Agreement.

## VII. Declaration

- a. **MyCaffe** – some parts of the Software may be derived from or otherwise use the MyCaffe AI Platform, which is an open-source project licensed under the Apache License Version 2.0 - for the MyCaffe license please see [MyCaffe License](#). For the MyCaffe open source project, please see the [MyCaffe GitHub](#).
- b. **Caffe** - Some parts of the Software may be derived from or otherwise use algorithms found in the Berkeley Caffe code, which is a BSD-licensed open-source project. The Caffe license is as follows.

```
** begin Caffe License **
Copyright (c) 2014, 2015, The Regents of the University of California (Regents)
All rights reserved.
```

```
All other contributions:
Copyright (c) 2014, 2015, the respective contributors
All rights reserved.
```

```
Caffe uses a shared copyright model: each contributor holds copyright over
their contributions to Caffe. The project versioning records all such
contribution and copyright details. If a contributor wants to further mark
their specific copyright on a particular contribution, they should indicate
their copyright solely in the commit message of the change when it is
committed.
```

### LICENSE

```
Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:
```

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

```
THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND
ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED
WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE
DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR
ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES
(INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;
LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND
ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS
SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
```

### CONTRIBUTION AGREEMENT

```
By contributing to the BVLC/caffe repository through pull-request, comment,
or otherwise, the contributor releases their content to the
license and copyright terms herein.
```

```
** end Caffe License **
```

Some parts of MyCaffe are derived from forks off the Caffe source (such as the GradientScalerLayer, forked at <https://github.com/ddtm/caffe>) which are also covered under the Caffe license above.

Some parts of MyCaffe are derived from forks off the Caffe source (such as the UnPoolingLayer, forked at <https://github.com/HyeonwooNoh/caffe>) which are also bound by the Caffe License above.

Some parts of MyCaffe are derived from forks off the Caffe source (such as the UnPoolingLayer1, forked at <https://github.com/mariolew/caffe-unpooling>) which are also bound by the Caffe License above.

- c. **NVCaffe/Caffe SSD** – Some parts of the Software or the MyCaffe AI Platform may be derived from or otherwise use the NVCaffe/Caffe SSD version of Caffe which is licensed as follows:

```
** begin NVCaffe/Caffe SSD license **  
COPYRIGHT
```

```
All changes from Caffe SSD (https://github.com/weiliu89/caffe/tree/ssd)  
Copyright (c) 2015, 2016 Wei Liu (UNC Chapel Hill), Dragomir Anguelov (Zoox),  
Dumitru Erhan (Google), Christian Szegedy (Google), Scott Reed (UMich Ann Arbor),  
Cheng-Yang Fu (UNC Chapel Hill), Alexander C. Berg (UNC Chapel Hill).  
All rights reserved.
```

```
All contributions by the University of California:  
Copyright (c) 2014, 2015, The Regents of the University of California (Regents)  
All rights reserved.
```

```
All other contributions:  
Copyright (c) 2014, 2015, the respective contributors  
All rights reserved.
```

```
Caffe uses a shared copyright model: each contributor holds copyright over  
their contributions to Caffe. The project versioning records all such  
contribution and copyright details. If a contributor wants to further mark  
their specific copyright on a particular contribution, they should indicate  
their copyright solely in the commit message of the change when it is  
committed.
```

#### LICENSE

```
Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions are met:
```

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

```
THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND  
ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED  
WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE  
DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR  
ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES  
(INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;  
LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND  
ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT  
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS  
SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
```

#### CONTRIBUTION AGREEMENT

```
By contributing to the BVLC/caffe repository through pull-request, comment,  
or otherwise, the contributor releases their content to the  
license and copyright terms herein.  
** end NVCaffe/Caffe SSD license **
```

- d. **t-SNE** - Some parts of the Software and the MyCaffe AI Platform may be derived from the t-SNE algorithm developed by Laurens van der Maaten. The t-SNE license is as follows:

```
** begin t-SNE License **
Copyright (c) 2014, Laurens van der Maaten (Delft university of Technology)
All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the above copyright
   notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright
   notice, this list of conditions and the following disclaimer in the
   documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software
   must display the following acknowledgement:
   This product includes software developed by the Delft University of Technology.
4. Neither the name of the Delft university of Technology nor the names of
   its contributors may be used to endorse or promote products derived from
   this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY LAURENS VAN DER MAATEN 'AS IS' AND ANY EXPRESS
OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO
EVENT SHALL LAURENS VAN DER MAATEN BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,
PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING
IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY
OF SUCH DAMAGE.
** end t-SNE License **
```

- e. **t-SNE with CUDA and Barnes Hut** - Some parts of the Software and the MyCaffe AI Platform may be derived from the open-source t-SNE with CUDA and Barnes Hut project developed by George Dimitriadis under the MIT license as follows:

```
** begin t-SNE with CUDA and Barnes Hut License **
MIT License
Copyright (c) 2016 George Dimitriadis

Permission is hereby granted, free of charge, to any person obtaining a copy
of this software and associated documentation files (the "Software"), to deal
in the Software without restriction, including without limitation the rights
to use, copy, modify, merge, publish, distribute, sublicense, and/or sell
copies of the Software, and to permit persons to whom the Software is
furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all
copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE
SOFTWARE.
** end t-SNE with CUDA and Barnes Hut License **
```



- f. **GPU MemTest** - Some parts of MyCaffe are derived from the open-source GPU MemTest project developed by Innovative Systems Lab, National Center for Supercomputing Applications under the Illinois Open Source License as follows:

```
** begin GPU MemTest License **
Illinois Open Source License

University of Illinois / NCSA
Open Source License

Copyright © 2009, University of Illinois. All rights reserved.

Developed by :

Innovative Systems Lab
National Center for Supercomputing Applications
http://www.ncsa.uiuc.edu/AboutUs/Directorates/ISL.html

Permission is hereby granted, free of charge, to any person obtaining a copy of
this software and associated documentation files (the "Software"), to deal with
the Software without restriction, including without limitation the rights to use,
copy, modify, merge, publish, distribute, sublicense, and / or sell copies of the
Software, and to permit persons to whom the Software is furnished to do so, subject
to the following conditions :

* Redistributions of source code must retain the above copyright notice, this list
of conditions and the following disclaimers.

* Redistributions in binary form must reproduce the above copyright notice, this list
of conditions and the following disclaimers in the documentation and / or other materials
provided with the distribution.

* Neither the names of the Innovative Systems Lab, the National Center for Supercomputing
Applications, nor the names of its contributors may be used to endorse or promote products
derived from this Software without specific prior written permission.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED,
INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A
PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE CONTRIBUTORS OR COPYRIGHT
HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF
CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE
OR THE USE OR OTHER DEALINGS WITH THE SOFTWARE.
** end GPU MemTest License **
```

- g. **GS-PCA** - Some parts of MyCaffe are derived from the GS-PCA algorithm described in the article by M. Andrecut, "Parallel GPU Implementation of Iterative PCA Algorithms", arXiv, 2008. <https://arxiv.org/abs/0811.1081> which are used with permission.

- h. **NCCL** - Some portions of the Software and the MyCaffe AI Platform (uses nccl-windows) may be derived from the open-source NCCL 'Nickel' project by NVIDIA under the following license:

```
** begin NCCL 'Nickel' License**
Copyright (c) 2015-2016, NVIDIA CORPORATION. All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:
* Redistributions of source code must retain the above copyright
  notice, this list of conditions and the following disclaimer.
* Redistributions in binary form must reproduce the above copyright
  notice, this list of conditions and the following disclaimer in the
  documentation and/or other materials provided with the distribution.
* Neither the name of NVIDIA CORPORATION, Lawrence Berkeley National
  Laboratory, the U.S. Department of Energy, nor the names of their
  contributors may be used to endorse or promote products derived
  from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS ``AS IS'' AND ANY
EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR
CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL,
EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,
PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR
PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY
OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The U.S. Department of Energy funded the development of this software
under subcontract 7078610 with Lawrence Berkeley National Laboratory.
** end NCCL 'Nickel' License**
```

- i. **DocPanelSuite** - Some portions of the Software are derived from the open-source DocPanelSuite project by Weifen Luo under the following license:

```
** begin DocPanelSuite License **
The MIT License

Copyright (c) 2007 weifen Luo (email: weifenluo@yahoo.com)

Permission is hereby granted, free of charge, to any person obtaining a copy of this
software and associated documentation files (the "Software"), to deal in the Software
without restriction, including without limitation the rights to use, copy, modify,
merge, publish, distribute, sublicense, and/or sell copies of the Software, and to
permit persons to whom the software is furnished to do so, subject to the
following conditions:

The above copyright notice and this permission notice shall be included in all copies
or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED,
INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A
PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT
HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF
CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE
OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
** end DocPanelSuite License **
```

- j. **ResNet-56 for CIFAR** – the ResNet-56 model was derived from the open-source ResNet-56 model by Yihui He at <https://github.com/yihui-he/resnet-cifar10-caffe> under the license:

```
** begin ResNet-56 License **  
MIT License
```

Copyright (c) 2016 Yihui He 何宜晖

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
** end ResNet-56 License **
```

- k. **VGG models for Neural Style Transfer** – the VGG16 and VGG19 model was derived from the open-source VGG models by K. Simonyan, A. Zisserman and available at [http://www.robots.ox.ac.uk/~vgg/research/very\\_deep/](http://www.robots.ox.ac.uk/~vgg/research/very_deep/) under the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), also see 'Very Deep Convolutional Networks for Large-Scale Image Recognition' (<https://arxiv.org/pdf/1409.1556.pdf>) by K. Simonyan, A. Zisserman, arXiv:1409.1556
- l. **A3C** - Some portions of the Software may use portions of the MyCaffe AI Platform that were re-written using or were inspired by the open-source A3C implementation from Jaromír Janisch located at <https://github.com/jaara/AI-blog/blob/master/CartPole-A3C.py> and licensed under the MIT License (<https://github.com/jaara/AI-blog/blob/master/LICENSE>):

```
** begin Janisch 'A3C' License**  
MIT License
```

```
Copyright (c) 2018 Jaromír Janisch
```

```
Permission is hereby granted, free of charge, to any person obtaining a copy  
of this software and associated documentation files (the "Software"), to deal  
in the Software without restriction, including without limitation the rights  
to use, copy, modify, merge, publish, distribute, sublicense, and/or sell  
copies of the Software, and to permit persons to whom the Software is  
furnished to do so, subject to the following conditions:
```

```
The above copyright notice and this permission notice shall be included in all  
copies or substantial portions of the Software.
```

```
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,  
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE  
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,  
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE  
SOFTWARE.
```

```
** end Janisch 'A3C' License**
```

- i. **DQN and C51**- Some portions of the Software may use portions of the MyCaffe AI Platform that use directly or are derivative versions of the open-source Google dopamine open-source project located at: <https://github.com/google/dopamine>, including the DQN and Rainbow Agents located at:

[https://github.com/google/dopamine/blob/master/dopamine/agents/dqn/dqn\\_agent.py](https://github.com/google/dopamine/blob/master/dopamine/agents/dqn/dqn_agent.py) and  
[https://github.com/google/dopamine/blob/master/dopamine/agents/rainbow/rainbow\\_agent.py](https://github.com/google/dopamine/blob/master/dopamine/agents/rainbow/rainbow_agent.py)

all licensed under the Apache 2.0 License

(<https://github.com/google/dopamine/blob/master/LICENSE>)

```
** begin google/dopamine License **
```

```
Copyright 2018 The Dopamine Authors.
```

```
Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at
```

```
http://www.apache.org/licenses/LICENSE-2.0
```

```
Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.
```

```
** end google/dopamine License **
```

- m. **DQN** - Some portions of the Software may use portions of the MyCaffe AI Platform that use directly or derivative versions of the open-source OpenAI baselines available on GitHub at: <https://github.com/openai/baselines> and license under the MIT license:

```
** begin OpenAI baselines License **  
The MIT License  
Copyright (c) 2017 OpenAI (http://openai.com)
```

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
** end OpenAI baselines License **
```

- n. **NoisyNet** - Some portions of the Software may use portions of the MyCaffe AI Platform that use or were inspired by the open-source Kaixhin/NoisyNet-A3C project available on GitHub at: <https://github.com/Kaixhin/NoisyNet-A3C> and license under the MIT license:

```
** begin Kaixhin/NoisyNet-A3C License**  
MIT License  
Copyright (c) 2017 Kai Arulkumaran
```

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
** end Kaixhin/NoisyNet-A3C License**
```

- o. **C51** - Some portions of the Software may use portions of the MyCaffe AI Platform that use directly or derivative versions of the open-source flyyufelix/C51-DDQN-Keras project available on Github at: <https://github.com/flyyufelix/C51-DDQN-Keras> and licensed under the MIT license available at: <https://github.com/flyyufelix/C51-DDQN-Keras/blob/master/LICENSE>

```
** begin flyyufelix/C51-Keras License**  
MIT License
```

Copyright (c) 2017 Felix Yu

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
** end flyyufelix/C51-Keras License**
```

- p. SSD – Some portions of the Software may use portions of the MyCaffe AI Platform that use directly or derivative version of the open-source weiliu89/caffe SSD project available on Github at: <https://github.com/weiliu89/caffe/tree/ssd> and licensed under the license available at: <https://github.com/weiliu89/caffe/blob/ssd/LICENSE>

```
** begin weiliu89/caffe License **
COPYRIGHT

All new contributions compared to the original branch:
Copyright (c) 2015, 2016 Wei Liu (UNC Chapel Hill), Dragomir Anguelov (Zoox),
Dimitru Erhan (Google), Christian Szegedy (Google), Scott Reed (UMich Ann Arbor),
Cheng-Yang Fu (UNC Chapel Hill), Alexander C. Berg (UNC Chapel Hill).
All rights reserved.

All contributions by the University of California:
Copyright (c) 2014, 2015, The Regents of the University of California (Regents)
All rights reserved.

All other contributions:
Copyright (c) 2014, 2015, the respective contributors
All rights reserved.

Caffe uses a shared copyright model: each contributor holds copyright over
their contributions to Caffe. The project versioning records all such
contribution and copyright details. If a contributor wants to further mark
their specific copyright on a particular contribution, they should indicate
their copyright solely in the commit message of the change when it is
committed.

LICENSE

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this
list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice,
this list of conditions and the following disclaimer in the documentation
and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND
ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED
WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE
DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR
ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES
(INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;
LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND
ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS
SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

CONTRIBUTION AGREEMENT

By contributing to the BVLC/caffe repository through pull-request, comment,
or otherwise, the contributor releases their content to the
license and copyright terms herein.
** end weiliu89/caffe License **
```

- q. **Fast-RCNN** Some portions of the Software may use portions of the MyCaffe AI Platform that use directly or derivative version of the open-source `rbgirshick/fast-rcnn` SSD project available on Github at: <https://github.com/rbgirshick/fast-rcnn> and licensed under the MIT license available at: <https://github.com/rbgirshick/fast-rcnn/blob/master/LICENSE>

```
** start rbgirshick/fast-rcnn License **Fast R-CNN  
Copyright (c) Microsoft Corporation
```

All rights reserved.

MIT License

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED \*AS IS\*, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
** end rbgirshick/fast-rcnn License **
```

- r. **AleControl, ALE and SDL** – The ATARI Gym uses the AleControl, which uses the ale\_interface DLL which uses SDL. The AleControl and ale\_interface DLL are both available on GitHub <https://github.com/MyCaffe/AleControl>. The ale\_interface DLL is a modified version of the Arcade-Learning-Environment (ALE) by mgbellemare and available on GitHub at <https://github.com/mgbellemare/Arcade-Learning-Environment>. The ALE is based off the Stella project by The Stella Team, which is available on GitHub at <https://github.com/stella-emu/stella>. The ale\_interface DLL, ALE and Stella all use the Simple DirectMedia Layer (SDL), which is available at <http://www.libsdl.org/>. The ATARI Gym uses several ATARI game ROM's made available by OpenAI at [https://github.com/openai/atari-py/tree/master/atari\\_py/atari\\_roms](https://github.com/openai/atari-py/tree/master/atari_py/atari_roms). The copyright and licenses for each of these pieces are as follows:



The AleControl is Copyright (C) 2018 SignalPop LLC and licensed under the Apache 2.0 License (<http://www.apache.org/licenses/>) and made available on GitHub at <https://github.com/MyCaffe/AleControl> and also on NuGet at <https://www.nuget.org/packages?q=AleControl>

The AleControl uses the Windows 64-bit ale\_interface.dll, which was built from source code from the open-source 'mgbellemare/Arcade-Learning-Environment' is licensed under the GNU GPL License with Copyright (C) 1995-2012 Bradford W. Mott, Stephen Anthony and the Stella Team, and Copyright (C) 2009-2012 Yavar Naddaf, Marc G. Bellemare, Joel Veness and the Artificial Intelligence Laboratory at the University of Alberta, and Copyright (C) 2018 SignalPop LLC for slight modifications.

The open-source 'mgbellemare/Arcade-Learning-Environment' available on GitHub at <https://github.com/mgbellemare/Arcade-Learning-Environment> (based on the Stella open-source project) is licensed under the GNU GPL License at <https://raw.githubusercontent.com/mgbellemare/Arcade-Learning-Environment/master/License.txt> with Copyright (C) 1995-2012 Bradford W. Mott, Stephen Anthony and the Stella Team, | and Copyright (C) 2009-2012 Yavar Naddaf, Marc G. Bellemare, Joel Veness and the Artificial Intelligence Laboratory at the University of Alberta <https://github.com/mgbellemare/Arcade-Learning-Environment/blob/master/Copyright.txt>

The open-source Stella project is available on Github at <https://github.com/stella-emu/stella> and is licensed under the GNU GPL License at <https://github.com/stella-emu/stella/blob/master/License.txt> with Copyright (C) 1995-2012 Bradford W. Mott, Stephen Anthony and the Stella Team

The Stella project, Arcade-Learning-Environment and the ale\_interface.dll use the SDL runtime environment. The Simple DirectMedia Layer (SDL for short) is a cross-platform library designed to make it easy to write multi-media software, such as games and emulators. The Simple DirectMedia Layer library source code is available from: <http://www.libsdl.org/> This library is distributed under the terms of the GNU LGPL license: <http://www.gnu.org/copyleft/lesser.html>

The ATARI roms, provided by OpenAI, are made available on Github at [https://github.com/openai/atari-py/tree/master/atari\\_py/atari\\_roms](https://github.com/openai/atari-py/tree/master/atari_py/atari_roms) are distributed under the GNU GPL License at <https://github.com/openai/atari-py/blob/master/License.txt>

- s. **LockBitmap** - Some portions of the Software may use portions of the MyCaffe AI Platform that use the LockBitmap.cs file provided by Van Maisuradze, From 'Work with Bitmaps Faster in C#' from Code Project at: <https://www.codeproject.com/Tips/240428/Work-with-Bitmaps-Faster-in-Csharp-3> and used under The Code Project Open License (CPOL) 1.02 (<https://www.codeproject.com/info/cpol10.aspx>).
- t. Some portions of the Software may use portions of the MyCaffe AI Platform that use the WAVReader.cs and WAVWriter.cs files were inspired by the WAVReader provided with the Spectrogram Generation in SampleTagger found on Code Project at <https://www.codeproject.com/Articles/806042/Spectrogram-generation-in-SampleTagger> and distributed under The Code Project Open License (CPOL) 1.02 (<https://www.codeproject.com/info/cpol10.aspx>)

- u. **Char-RNN** - Some portions of the Software may use portions of the MyCaffe AI Platform that were re-written using or were inspired by the open-source Char-RNN implementation from adeptierre located at <https://github.com/adeptierre/caffe-char-rnn> and licensed under the MIT License (bottom of <https://github.com/adeptierre/caffe-char-rnn/blob/master/README.md>), MIT License from [https://en.wikipedia.org/wiki/MIT\\_License](https://en.wikipedia.org/wiki/MIT_License):

```
** begin adeptierre 'Char-RNN' MIT License**  
Copyright (c) 2017 adeptierre
```

```
Permission is hereby granted, free of charge, to any person obtaining a copy  
of this software and associated documentation files (the "Software"), to deal  
in the Software without restriction, including without limitation the rights  
to use, copy, modify, merge, publish, distribute, sublicense, and/or sell  
copies of the Software, and to permit persons to whom the Software is  
furnished to do so, subject to the following conditions:
```

```
The above copyright notice and this permission notice shall be included in all  
copies or substantial portions of the Software.
```

```
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,  
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE  
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,  
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE  
SOFTWARE.
```

```
** end adeptierre 'Char-RNN' MIT License**
```

- v. Through the MyCaffe.converter.onnx component, the Software may indirectly uses the OnnxControl which is used under the Apache 2.0 license (<https://github.com/MyCaffe/OnnxControl/blob/master/LICENSE>). The OnnxControl is a C# component that uses the onnx.proto3 and onnx-operators-proto3 files made available by the ONNX project Contributors located at <https://onnx.ai> under the MIT license shown below and available at: <https://github.com/onnx/onnx/blob/master/LICENSE>.

```
** begin ONNX license **
```

```
MIT License
```

```
Copyright (c) ONNX Project Contributors  
All rights reserved.
```

```
Permission is hereby granted, free of charge, to any person obtaining a copy  
of this software and associated documentation files (the "Software"), to deal  
in the Software without restriction, including without limitation the rights  
to use, copy, modify, merge, publish, distribute, sublicense, and/or sell  
copies of the Software, and to permit persons to whom the Software is  
furnished to do so, subject to the following conditions:
```

```
The above copyright notice and this permission notice shall be included in all  
copies or substantial portions of the Software.
```

```
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,  
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE  
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,  
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE  
SOFTWARE.
```

```
** end ONNX license **
```

- w. Portions of the LSTMAttention and Attention layers may use portions of or were inspired by the open source project mashawy/Seq2SeqLearn Github project by Mohamed Ashmawy available at <https://github.com/mashmawy/Seq2SeqLearn> and distributed under the MIT license.

- x. Portions of the LSTMAttention layer may use portions of or was inspired by, and uses training data from the open source GitHub project HectorPulido/Chatbot-seq2seq-C- by Hector Pulido available at <https://github.com/HectorPulido/Chatbot-seq2seq-C-> and licensed under the MIT license (<https://github.com/HectorPulido/Chatbot-seq2seq-C-/blob/master/LICENSE>).

```
** begin Chatbot-seq2seq-C- license **
```

```
MIT License
```

```
Copyright (c) 2018 Hector Pulido
```

```
Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:
```

```
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.
```

```
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
```

```
** end Chatbot-seq2seq-C- license **
```

- y. The Software uses several of the icons from the Microsoft Visual Studio Image Library (2012, 2015, and/or 2017) available at <https://www.microsoft.com/en-us/download/details.aspx?id=35825> which are bound by the Visual Studio 2012 Image Library EULA.docx, Visual Studio 2015 Image Library EULA.docx or Visual Studio 2017 Image Library EULA.docx license agreements also available at the link shown above.
- z. The sample WAV file 'How\_I\_Feel.x.wav' is distributed with permission from CLOV15 Tunes LLC. For more information on CLOV15, see <https://soundcloud.com/clov15>.
- aa. SignalPop is the curator for the MyCaffe open source project found on GitHub at <http://github.com/mycaffe>. The MyCaffe AI Platform is built from this open-source project which is licensed under the Apache License, version 2.0 available at <https://github.com/MyCaffe/MyCaffe/blob/master/LICENSE>.