

Domain Specific Language	Reference to the paper
<p>Tensor Comprehensions: Framework-Agnostic High-Performance Machine Learning Abstractions</p> <p>[A: Nicolas Vasilache, Oleksandr Zinenko, Theodoros Theodoridis, Priya Goyal, Zachary DeVito, William S. Moses, Sven Verdoolaege, Andrew Adams, Albert Cohen]</p>	<p>https://arxiv.org/abs/1802.04730</p>
<p>Tiramisu: a polyhedral compiler for expressing fast and portable code</p> <p>[A: Riyadh Baghdadi, Jessica Ray, Malek Ben Romdhane, Emanuele Del Sozzo, Abdurrahman Akkas, Yunming Zhang, Patricia Suriana, Shoaib Kamil, Saman Amarasinghe]</p>	<p>https://dl.acm.org/doi/10.5555/3314872.3314896</p>
<p>Diesel: DSL for linear algebra and neural net computations on GPUs</p> <p>[A: Venmugil Elango, Norm Rubin, Mahesh Ravishankar , Hariharan Sandanagobalane, Vinod Grover]</p>	<p>https://dl.acm.org/doi/10.1145/3211346.3211354</p>
<p>Caffe: Convolutional Architecture for Fast Feature Embedding</p> <p>[A: Yangqing Jia, Evan Shelhamer, Jeff Donahue, Sergey Karayev, Jonathan Long, Ross Girshick, Sergio Guadarrama, Trevor Darrell]</p>	<p>https://dl.acm.org/doi/10.1145/2647868.2654889</p>
<p>Halide: Decoupling algorithms from schedules for easy optimization of image processing pipelines</p> <p>[A: Jonathan Ragan-Kelley, Andrew Adams, Sylvain Paris, Marc Levoy, Saman Amarasinghe, Frédo Durand]</p>	<p>https://dl.acm.org/doi/10.1145/2185520.2185528</p>
<p>TVM: an automated end-to-end optimizing</p>	<p>https://dl.acm.org/doi/10.5555/3291168.3291211</p>

<p>compiler for deep learning</p> <p>[A: Tianqi Chen, Thierry Moreau, Ziheng Jiang, Lianmin Zheng, Eddie Yan, Meghan Cowan, Haichen Shen, Leyuan Wang, Yuwei Hu, Luis Ceze, Carlos Guestrin, Arvind Krishnamurthy]</p>	
<p>Latte: a language, compiler, and runtime for elegant and efficient deep neural networks</p> <p>[A: Leonard Truong, Rajkishore Barik, Ehsan Toton, Hai Liu, Chick Markley, Armando Fox, Tatiana Shpeisman]</p>	<p>https://dl.acm.org/doi/10.1145/2908080.2908105</p>
<p>GraphIT and Universal Graph Framework</p>	<p>http://groups.csail.mit.edu/commit/papers/2020/ajay-sm-thesis.pdf</p>
<p>MLIR Affine dialect</p>	<p>https://mlir.llvm.org/docs/Dialects/Affine/</p>
<p>Iteration graphs in Tensor Algebra Compiler(TACO)</p> <p>It is a compiler that generates optimized code for sparse tensor multiplication. Its uniqueness lies in its ability to generate code that is as performant as Hand-written case-by-case kernels</p>	<p>http://tensor-compiler.org/kjolstad-oopsla17-tensor-compiler.pdf</p> <p>This is a nice talk on TACO:</p> <p>https://www.youtube.com/watch?v=yAtG64qV2nM</p>