@article{Vasilache:2019:NAL:3366460.3355606, author = {Vasilache, Nicolas and Zinenko, Oleksandr and Theodoridis, Theodoros and Goyal, Priya and Devito, Zachary and Moses, William S. and Verdoolaege, Sven and Adams, Andrew and Cohen, Albert}, title = {The Next 700 Accelerated Layers: From Mathematical Expressions of Network Computation Graphs to Accelerated GPU Kernels, Automatically}, journal = {ACM Trans. Archit. Code Optim.}, issue date = {November 2019}, volume $= \{16\}, number = \{4\}, month = oct, year = \{2019\}, issn = \{1544-3566\}, pages = \{38:1-38:26\},$ articleno = $\{38\}$, numpages = $\{26\}$, url = $\{http://doi.acm.org/10.1145/3355606\}$, doi = $\{10.1145/3355606\}, acmid = \{3355606\}, publisher = \{ACM\}, address = \{New York, NY, USA\}, \}$ keywords = {Deep learning layers, GPU acceleration, polyhedral compilation}, } @inproceedings{Augustine:2019:GPC:3314221.3314615, author = {Augustine, Travis and Sarma, Janarthanan and Pouchet, Louis-Noël and Rodríguez, Gabriel}, title = {Generating Piecewise-regular Code from Irregular Structures}, booktitle = {Proceedings of the 40th ACM SIGPLAN Conference on Programming Language Design and Implementation}, series = {PLDI 2019}, year = {2019}, isbn = {978-1-4503-6712-7}, location = {Phoenix, AZ, USA}, pages = {625-639}, numpages = {15}, url = {http://doi.acm.org/10.1145/3314221.3314615}, doi = {10.1145/3314221.3314615}, acmid = {3314615}, publisher = {ACM}, address = {New York, NY, USA}, keywords = {Polyhedral compilation, SpMV, sparse data structure, trace compression}, } @inproceedings{Rawat:2016:ERM:2884045.2884047, author = {Rawat, Prashant Singh and Hong, Changwan and Ravishankar, Mahesh and Grover, Vinod and Pouchet, Louis-Noël and Sadayappan, P.}, title = {Effective Resource Management for Enhancing Performance of 2D and 3D Stencils on GPUs}, booktitle = {Proceedings of the 9th Annual Workshop on General Purpose Processing Using Graphics Processing Unit}, series = {GPGPU '16}, year = {2016}, isbn = {978-1-4503-4195-0}, location = {Barcelona, Spain}, pages = $\{92-102\}$, numpages = $\{11\}$, url = {http://doi.acm.org/10.1145/2884045.2884047}, doi = {10.1145/2884045.2884047}, acmid = {2884047}, publisher = {ACM}, address = {New York, NY, USA}, keywords = {GPGPU, resource

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eprint	= {1805.02566},
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