

| Dimension Group | | | Workload Placement Strategies | | | | | | | | | | | | | | | | | | Cost Estimation | | | | | | Heterog. Code Management | | | | | | | |
|--------------------------------|------|-----------------------|-------------------------------|-------------------|-----------------------|-----------------|--------|-------------------|-----|-------------|----------|------|----------|------------|-----|---------|------------------|--------|-----------|-------------------|-----------------|------------|-------------------|-------------|---------|------------|--------------------------|-------|-----------------|----------|------------|---|---|---|
| Dimensions | | | Plmt. Strategy | | Off-chip Cache Policy | | | Plmt. Granularity | | | | | | Plmt. Time | | | Plmt. Decision | | | Plmt. Pred. Model | | | Monitored Metrics | | | | GPU Prog. Method | | | | | | | |
| Features | Year | Link | Data shipping | Function shipping | Semantic-aware | Frequency-based | Greedy | No caching | Job | Application | Pipeline | Task | Function | Segment | Bit | Runtime | Compilation time | Hybrid | Automatic | Semi-automatic | Manual | Cost model | Heuristic model | Learn model | Latency | Throughput | Energy consumption | Price | Kernel template | Compiler | Raw kernel | | | |
| Qilin | 2009 | [url] | x | | | | x | | | | | x | | | | x | | | | x | | x | | x | | | x | | | | | x | | |
| StarPU | 2009 | [url] | x | | | | x | | | | | x | | | | x | | | | x | | x | | x | | | | | | x | | | | |
| GDB | 2009 | [url] | x | | | | | x | | | | x | | | | | x | | | x | | x | | | | | | | | | | x | | |
| Kerr et al.@ASPLOS'10 | 2010 | [url] | x | | | | | x | | x | | | | | | | x | | | x | | | | x | | | | | | x | x | | | |
| Ravi et al.@ICS'10 | 2010 | [url] | x | | | | | x | | | | x | | | | x | | | | x | | | x | | x | | | | | | x | | | |
| Heterogeneous Linpack | 2010 | [url] | x | | | | | x | | | | x | | | | x | | | | x | | x | | x | | | | | | x | | | | |
| MEGHA | 2011 | [url] | x | | | | | x | | | | x | | | | x | | | | x | | x | | x | | | | | | | x | | | |
| Rectangle method | 2011 | [url] | x | | | | | x | | | | | | x | | | x | | | x | | x | | x | | x | | | | | | x | | |
| Grewe and O'Boyle@CC'11 | 2011 | [url] | x | | | | | x | | | | x | | | | | x | | | x | | | | x | | x | | | | | | x | | |
| Ravi et al.@CCGRID'12 | 2012 | [url] | x | | | | | x | x | | | | | | | | x | | | x | | | x | | x | | | | | x | | | | |
| Pirk@VLDBW'12 | 2012 | [url] | x | | | | | x | | | | | | | x | | x | | | x | | | x | | x | | | | | | | x | | |
| SnuCL | 2012 | [url] | x | | | | x | | | | | x | | | | x | | | | x | | | x | | x | | | | | | | x | | |
| SCCG | 2012 | [url] | x | | | | | x | | | x | | | | | | | x | | x | | | x | | x | | | | | | | x | | |
| GreenGPU | 2012 | [url] | x | | | | | x | | | | x | | | | x | | | | x | | | x | | x | | | x | | | | x | | |
| DAGuE | 2012 | [url] | x | | | | | x | | | | x | | | | x | | | | x | | | x | | x | | | | | | | x | | |
| AHP | 2012 | [url] | x | | | | | x | | | x | | | | | | | | x | x | | | x | | x | | | | | | | x | | |
| Clarke et al.@Euro-Par'12 | 2012 | [url] | x | | | | | x | | | | x | | | | x | | | | x | | x | | x | | | | | | x | | | | |
| MC-MOC | 2012 | [url] | x | | | | | x | | | | x | | | | x | | | | | | x | | x | | | | | | | | x | | |
| Legion | 2012 | [url] | x | | | | | x | | | | x | | | | | | x | | | | x | | x | | | | | | | | x | | |
| Extended TOTEM | 2013 | [url] | x | | | | | x | | | | x | | | | | x | | | | | x | | x | | | | x | | | | x | | |
| Kofler et al.@ICS'13 | 2013 | [url] | x | | | | | x | | | | x | | | | | | x | | | | | | x | | | | | | | | x | | |
| SKMD | 2013 | [url] | x | | | | | x | | | | x | | | | x | | | | x | | | | x | | | | | | | | x | | |
| A&R | 2014 | [url] | x | | | x | | | | | | | | | x | | x | | | x | | | | x | | | | | | | | x | | |
| Cumming et al.@SC'14 | 2014 | [url] | x | | | | x | | | x | | | | | | | x | | | | x | x | | x | | | | x | | | | x | | |
| Ocelot+HyPE | 2014 | [url] | x | | | x | | | | | | x | | | | x | | | | x | | | | x | | | | | | | | x | | |
| Cheng et al.@DaMoN'15 | 2015 | [url] | x | | | | | x | | | | x | | | | | x | | | | x | | x | | x | | | | | | | x | | |
| Kamagel et al.@EDBTW'15 | 2015 | [url] | x | | | | | x | | | | x | | | | | | x | | | | | | x | | | | | | | | x | | |
| Dask | 2015 | [url] | x | | | x | | | | | | x | | | | | x | | | x | x | | x | | x | | | | | | x | | | |
| TensorFlow | 2016 | [url] | x | | | | x | | | | | x | | | | | x | | | x | | x | | x | | x | | | | | | x | | |
| HyGraph | 2016 | [url] | x | | | | x | | | | | | | | | x | | | | x | | x | | x | | x | | | | | | x | | |
| Sirbu and Babaoglu@Euro-Par'16 | 2016 | [url] | x | | | | | x | x | | | | | | | | x | | | x | | x | | x | | | | | | | | | | |
| Spark-GPU | 2016 | [url] | x | | | x | | | | | | x | | | | | | | | x | | | | x | | | | | | | | x | | |
| SABER | 2016 | [url] | x | | | | | x | | x | | | | | | | | | | x | | | | | | | x | | | | | | x | |
| Robust CoGaDB | 2016 | [url] | | x | | x | | | | | | x | | | | | x | | | x | | | | x | | | | | | | | x | | |
| Wen and O'Boyle@GPGPU-PPoPP'17 | 2017 | [url] | x | | | | | x | | | | x | | | | | | | | x | | | | x | | | | | | | | x | | |
| Caldera | 2017 | [url] | x | | | | | x | | x | | | | | | | | | | x | | | | x | | | | | | | | x | | |
| Mayer et al.@DIDL'17 | 2017 | [url] | x | | | | | x | | | | x | | | | | | | | x | x | | | x | | | | | | | | x | | |
| HERO | 2017 | [url] | | x | | x | | | | | | | | x | | | | | | x | | | | x | | | | | | | | x | | |
| PyCOMPSs | 2018 | [url] | x | | | | | x | | | | x | | | | | x | | | | x | | x | | | | | | | | | x | | |
| Hierarchical Planner | 2018 | [url] | x | | | | | x | | | | x | | | | | x | | | | | | | x | | | | | | | | x | | |
| Placeto | 2018 | [url] | x | | | | | x | | | x | | | | | | x | | | | | | | x | | | | | | | | x | | |
| ADTS | 2018 | [url] | x | | | | | x | | | | x | | | | | | | | x | | | | x | | | | | | | | x | | |
| Ray | 2018 | [url] | x | | | x | | | | | | x | | | | | | x | x | | | | x | | x | | | | | | | x | | |
| GfLink | 2018 | [url] | x | | | x | | | | | | x | | | | | | | | | x | | | x | | | | | | | | | x | |
| Gowanlock et al.@DaMoN'19 | 2019 | [url] | x | | | | | x | | | | x | | | | | x | | | | x | | x | | x | | | | | | | x | | |
| Troodon | 2019 | [url] | x | | | | | x | x | | | | | | | | x | | | | | | | x | | x | | | | | | | x | |
| PLB-HAC | 2019 | [url] | x | | | | | x | | | | x | | | | | | | | x | | | | x | | x | | | | | | | x | |
| PyTorch | 2019 | [url] | x | | | | x | | | | | | | | | | x | | | x | x | | x | | x | | | | | | | x | | |
| HetExchange | 2019 | [url] | x | | | | | x | | | | x | | | | | | | | x | | | | x | | x | | | | | | | x | |
| Symphony | 2020 | [url] | x | | | | | x | | | | x | | | | | | | | x | | | | x | | | | | | | | | | |
| Crystal | 2020 | [url] | x | | | | | x | | x | | | | | | | x | | | | | x | x | x | | | | | | | | | x | |
| MCL Schedulers | 2020 | [url] | | x | | | | x | | | | x | | | | | x | | | x | | | x | | x | | | | | | | | x | |
| Lutz et al.@SIGMOD'20 | 2020 | [url] | x | | | | | x | | | | x | | | | | | | | x | | | | x | | | | | | | | | x | |
| LDWP-IAWP | 2020 | [url] | x | | | | | x | | | | | | x | | | | | | x | | | | x | | | | | | | | | x | |
| ZeRO-Offload | 2021 | [url] | x | | | | | x | | | | x | | | | | x | | | x | | | | x | | | | | | | | | x | |
| Sigmoid | 2021 | [url] | x | | | | | | | | | x | | | | | | | | x | | | | | | | | | | | | | | x |
| Li et al.@J. Syst. Arch'2021 | 2021 | [url] | x | | | | | x | | | | x | | | | | x | | | | | | | x | | | | | | | | | x | |
| Lee and Park@ICDEW'21 | 2021 | [url] | x | | | | | x | | | | x | | | | | | | | | x | | | | | | | | | | | | x | |
| RateupDB | 2021 | [url] | x | | | x | | | | | | | | | | | | | | x | | | | x | | | | | | | | | x | |
| READYs | 2021 | [url] | x | | | | | x | | | | x | | | | | x | | | | | | | x | | | | | | | | | x | |
| Compressed Crystal | 2022 | [url] | x | | | | | x | | x | | | | | | | x | | | | | x | x | | | | | | | | | | | |