


Papers on Compiler Optimizations: Analysis and Transformations (1952-1994)

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| Title | Venue Type | Venue Name | Type | Year | Sources |
|---|------------|----------------------|------|------|------------------|
| The problem of simplifying truth functions [9] | T&F | AMM | J | 1952 | O |
| Minimization of Boolean functions [10] | Bell Labs | Bell System Tech. J. | J | 1956 | O |
| An algorithm for translating Boolean expressions [11] | ACM | JACM | J | 1962 | S |
| High speed compilation of efficient object code [12] | ACM | CACM | J | 1965 | D |
| Peephole optimization [13] | ACM | CACM | J | 1965 | E |
| Program optimization [14] | - | PP | C | 1966 | A, D, E, M, O, S |
| Index Register Allocation [15] | ACM | JACM | J | 1966 | E |
| Analysis of Programs for Parallel Processing [16] | IEEE | TC (TEC) | J | 1966 | O |
| Object code optimization [17] | ACM | CACM | J | 1969 | A, D, E |
| Local optimizations [18] | ACM | PLDI (SCO) | C | 1970 | E |
| Detection and parallel execution of independent instructions [19] | IEEE | TCO | J | 1970 | S |
| Global common subexpression elimination [20] | ACM | PLDI (SCO) | C | 1970 | D, E, M |
| The Generation of Optimal Code for Arithmetic Expressions [21] | ACM | JACM | J | 1970 | D, E, M |
| Control flow analysis [22] | ACM | PLDI (SCO) | C | 1970 | D, E |
| A Basis for Program Optimization [23] | IFIP | NH | C | 1971 | A, D, E, M, O, S |
| A catalogue of optimizing transformations [?]] | - | PH | C | 1972 | A, D, E, M, O, S |
| Flow graph reducibility [24] | ACM | STOC | C | 1972 | D |
| Use-definition chains with applications [25] | Elsevier | COLA (COMLAN) | C | 1972 | E |
| A global flow analysis algorithm [26] | T&F | JCM | J | 1972 | E |
| Safety of code motion [27] | T&F | JCM | J | 1972 | O |
| On the Number of Operations Simultaneously Executable in Fortran-Like Programs and Their Resulting Speedup [28] | IEEE | TCO | J | 1972 | D, O |
| Testing flow graph reducibility [29] | ACM | STOC | C | 1973 | A |
| A unified approach to global program optimization [30] | ACM | POPL | C | 1973 | A, D, E, M, O, S |
| Fast algorithms for the elimination of common subexpressions [31] | Springer | Acta Inf. | J | 1973 | A, D, E, O |
| Register allocation via usage counts [32] | ACM | CACM | J | 1974 | A |
| Analysis of structured programs [33] | ACM | STOC | C | 1974 | D |
| Characterizations of Reducible Flow Graphs [34] | ACM | JACM | J | 1974 | D, E |
| The parallel execution of DO loops [35] | ACM | CACM | J | 1974 | D, O |
| Interprocedural Data Flow Analysis [36] | - | IFIP | J | 1974 | D, O |

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| Time and parallel processor bounds for linear recurrence systems [37] | IEEE | TCO | J | 1975 | S |
| A simple algorithm for global data flow analysis problems [38] | SIAM | SICOMP | J | 1975 | A, E, O |
| A program data flow analysis procedure [39] | ACM | CACM | J | 1976 | A |
| Recursion analysis for compiler optimization [40] | ACM | CACM | J | 1976 | O |
| Optimal Code Generation for Expression Trees [41] | ACM | JACM | J | 1976 | A, D, E |
| A Fast and Usually Linear Algorithm for Global Flow Analysis [42] | ACM | JACM | J | 1976 | E, O |
| Code generation for expressions with common subexpressions [43] | ACM | POPL | C | 1976 | E, S |
| Global data flow analysis and iterative algorithms [44] | ACM | JACM | J | 1976 | E, O |
| On Live-Dead Analysis for Global Data Flow Problems [45] | ACM | JACM | J | 1977 | A |
| Symbolic evaluation and the global value graph [46] | ACM | POPL | C | 1977 | A |
| High-level data flow analysis [47] | ACM | CACM | J | 1977 | A |
| Abstract interpretation [48] | ACM | POPL | C | 1977 | D |
| An algorithm for reduction of operator strength [49] | ACM | CACM | J | 1977 | E |
| A transformation system for developing recursive programs [50] | ACM | JACM | J | 1977 | S |
| Arithmetic shifting considered harmful [51] | ACM | SIGPLAN Notices | J | 1977 | S |
| Monotone data flow analysis frameworks [52] | Springer | Acta Inf. | J | 1977 | A, D, E, O |
| Program Improvement by Source-to-Source Transformation [53] | ACM | CACM | J | 1977 | D, O |
| An analysis of inline substitution for a structured programming language [54] | ACM | CACM | J | 1977 | M, S |
| A new method for compiler code generation [55] | ACM | POPL | C | 1978 | D |
| A practical interprocedural data flow analysis algorithm [56] | ACM | CACM | J | 1978 | A, D, E, O |
| Data Flow Analysis for Procedural Languages [57] | ACM | JACM | J | 1979 | A |
| Constructing the Call Graph of a Program [58] | IEEE | TSE | J | 1979 | O |
| Data flow languages [59] | IEEE | MARK | W | 1979 | S |
| Time and parallel processor bounds for Fortran-like loops [60] | IEEE | TCO | J | 1979 | S |
| Unrolling loops in Fortran [61] | Wiley | SPE | J | 1979 | S |
| A fast algorithm for finding dominators in a flowgraph [62] | ACM | TOPLAS | J | 1979 | A, E, M, O |
| An efficient way to find the side effects of procedural calls and the aliases of variables [63] | ACM | POPL | C | 1979 | A, D, E, S |
| Global optimization by suppression of partial redundancies [64] | ACM | CAMC | J | 1979 | A, D, E, O, S |
| Predicting the effects of optimization on a procedure body [65] | ACM | PLDI (SCC) | C | 1979 | E, S |
| Structural analysis: A new approach to flow analysis in optimizing compilers [66] | Elsevier | COLA (COMLAN) | C | 1980 | A |
| The design and application of a retargetable peephole optimizer [67] | ACM | TOPLAS | J | 1980 | E |
| Data flow supercomputers [68] | IEEE | Computer | J | 1980 | S |
| High-speed multiprocessors and compilation techniques [69] | IEEE | TCO | J | 1980 | S |
| Interprocedural data flow analysis in the presence of pointers, procedure variables, and label variables [70] | ACM | POPL | C | 1980 | A, E, O |
| Deciding Linear Inequalities by Computing Loop Residues [71] | ACM | JACM | J | 1981 | D |
| A precise inter-procedural data flow algorithm [72] | ACM | POPL | C | 1981 | O, S |
| Register allocation via coloring [73] | Elsevier | COLA (COMLAN) | C | 1981 | A, D, E, O, S |
| Reduction of operator strength [74] | NJ | Program flow analysis | J | 1981 | A, E, S |
| Dependence graphs and compiler optimizations [75] | ACM | POPL | C | 1981 | O, S |
| On the performance enhancement of paging systems through program analysis and transformations [76] | IEEE | TCO | J | 1981 | D, S |
| Optimizing delayed branches [77] | ACM | MICRO | W | 1982 | D |
| A composite hoisting-strength reduction transformation for global program optimization part i [78] | T&F | JCM | J | 1982 | E |
| Optimization of range checking [79] | ACM | PLDI (SCC) | C | 1982 | E |

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| Register allocation and spilling via graph coloring [80] | ACM | PLDI | C | 1982 | A, D, E, M, O, S |
| Experience with the SETL optimizer [81] | ACM | TOPLAS | J | 1983 | S |
| Postpass Code Optimization of Pipeline Constraints [82] | ACM | TOPLAS | J | 1983 | A, E |
| Conversion of control dependence to data dependence [83] | ACM | POPL | C | 1983 | O, S |
| Register allocation and exhaustive peephole optimization [84] | Wiley | SPE | J | 1984 | E |
| Automatic generation of peephole optimizations [85] | Springer | CC | C | 1984 | E |
| Analysis of interprocedural side effects in a parallel programming environment [86] | Springer | ICSP | C | 1984 | O |
| Polyvariant mixed computation for analyzer programs [87] | Springer | Acta Inf. | J | 1984 | O |
| Stream processing [88] | ACM | LFP | C | 1984 | O |
| A hierarchical basis for reordering transformations [89] | ACM | POPL | C | 1984 | O |
| Register allocation by priority-based coloring [90] | ACM | PLDI (SCC) | C | 1984 | A, E, O |
| Automatic loop interchange [91] | ACM | PLDI (SCC) | C | 1984 | O, S |
| Efficient computation of flow insensitive interprocedural summary information [92] | ACM | PLDI (SCC) | C | 1984 | A, O |
| On linearizing parallel code [93] | ACM | POPL | C | 1985 | O |
| Distributed execution of functional programs using serial combinators [94] | IEEE | TCO | J | 1985 | S |
| Strictness analysis-a practical approach [95] | Springer | FPCA | C | 1985 | S |
| A linear algorithm for finding dominators in flow graphs and related problems [96] | ACM | STOC | C | 1985 | E, M, O |
| Efficient instruction scheduling for a pipelined architecture [97] | ACM | PLDI (SCC) | C | 1986 | A |
| Efficient symbolic analysis of programs [98] | ACM | JCSS | J | 1986 | A |
| Graph-Based Algorithms for Boolean Function Manipulation [99] | IEEE | TC | J | 1986 | D |
| Loops skewing: The wavefront method revisited [100] | Springer | JPP | J | 1986 | O |
| Highly concurrent scalar processing [101] | ACM | CAN | J | 1986 | O |
| Multiplication by integer constants [102] | Wiley | SPE | J | 1986 | S |
| Global register allocation at link time [103] | ACM | PLDI | C | 1986 | A, E |
| Interprocedural constant propagation [104] | ACM | PLDI | C | 1986 | A, D, E, O, S |
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| Direct parallelization of call statements [108] | ACM | PLDI (SCC) | C | 1986 | O, S |
| Code motion of control structures in high-level languages [109] | ACM | POPL | C | 1986 | E, M |
| Automatic inference and fast interpretation of peephole optimization rules [110] | Wiley | SPE | J | 1987 | E |
| Compiler Algorithms for Synchronization [111] | IEEE | TCO | J | 1987 | O |
| Automatic decomposition of scientific programs for parallel execution [112] | ACM | POPL | C | 1987 | O |
| Guided Self-Scheduling: A Practical Scheduling Scheme for Parallel Supercomputers [113] | IEEE | TCO | J | 1987 | S |
| Loop coalescing: A compiler transformation for parallel machines [114] | ACM | ICPP | C | 1987 | S |
| Strategies for cache and local memory management by global program transformation [115] | Springer | ICS | C | 1987 | S |
| The program dependence graph and its use in optimization [116] | ACM | TOPLAS | J | 1987 | A, E, M, O |
| Automatic translation of Fortran programs to vector form [117] | ACM | TOPLAS | J | 1987 | D, O, S |
| An efficient approach to data flow analysis in a multiple pass global optimizer [118] | ACM | PLDI | C | 1988 | A |
| A solution to a problem with Morel and Renvoise's "Global optimization by suppression of partial redundancies" [119] | ACM | TOPLAS | J | 1988 | E |

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| Efficient computation of flow-insensitive interprocedural summary information—a correction [120] | ACM | SIGPLAN Notices | J | 1988 | O |
| Dependence of multi-dimensional array references [121] | ACM | ICS | C | 1988 | O |
| The importance of direct dependences for automatic parallelization [122] | ACM | ICS | C | 1988 | O |
| Introducing symbolic problem solving techniques in the dependence testing phases of a vectorizer [123] | ACM | ICS | C | 1988 | O |
| Generating sequential code from parallel code [124] | ACM | SC | C | 1988 | O |
| Advanced loop optimizations for parallel computers [125] | ACM | ICS | C | 1988 | S |
| An introduction to a formal theory of dependence analysis [126] | Springer | JSC | J | 1988 | S |
| Analysis of interprocedural side effects in a parallel programming environment [127] | ACM | ICS | C | 1988 | S |
| Array expansion [128] | ACM | ICS | C | 1988 | S |
| Loop quantization: A generalized loop unwinding technique [129] | ACM | JPDC | J | 1988 | S |
| Supernode partitioning [130] | ACM | PLDI | C | 1988 | S |
| A fast algorithm for code movement optimisation [131] | ACM | PLDI | C | 1988 | A, E |
| Compiling programs for distributed-memory multiprocessors [132] | Elsevier | JSC | J | 1988 | O, S |
| Optimal loop parallelization [133] | ACM | PLDI | C | 1988 | A, E, M, S |
| Software pipelining: an effective scheduling technique for VLIW machines [134] | ACM | PLDI | C | 1988 | D, E |
| The program summary graph and flow-sensitive interprocedural data flow analysis [135] | ACM | PLDI | C | 1988 | A, O |
| A framework for determining useful parallelism [136] | ACM | ICS | C | 1988 | O, S |
| An overview of the PTRAN analysis system for multiprocessing [137] | Elsevier | JPDC | J | 1988 | D, S |
| Efficient interprocedural analysis for program parallelization and restructuring [138] | ACM | PPoPP (PPEALS) | C | 1988 | O, S |
| Compiling issues for supercomputers [139] | ACM/IEE | SC | C | 1988 | O, S |
| Minimizing register usage penalty at procedure calls [140] | ACM | PLDI | C | 1988 | A, S |
| Estimating interlock and improving balance for pipelined architectures [141] | Elsevier | JPDC | J | 1988 | O, S |
| Global value numbers and redundant computations [142] | ACM | POPL | C | 1988 | E, O |
| Perfect pipelining: A new loop parallelization technique [143] | Springer | ESOP | C | 1988 | A, S |
| Code scheduling and register allocation in large basic blocks [144] | ACM | SC | C | 1988 | A, E |
| Interprocedural side-effect analysis in linear time [145] | ACM | PLDI | C | 1988 | A, E, O |
| Unified management of registers and cache using liveness and cache bypass [146] | ACM | PLDI | C | 1989 | A |
| A new algorithm for composite hoisting and strength reduction optimisation [147] | T&F | JCM | J | 1989 | E |
| Program optimization for instruction caches [148] | ACM | ASPLOS | C | 1989 | A |
| Dependence analysis for pointer variables [149] | ACM | PLDI | C | 1989 | E |
| The program dependence graph and vectorization [150] | ACM | POPL | C | 1989 | O |
| Achieving high instruction cache performance with an optimizing compiler [151] | ACM | ISCA | C | 1989 | S |
| Evaluating the performance of four snooping cache coherency protocols [152] | IEEE | ICSA | C | 1989 | S |
| Scans as primitive parallel operations [153] | IEEE | TCO | J | 1989 | S |
| Code generation using tree matching and dynamic programming [154] | ACM | TOPLAS | J | 1989 | A, D, E, M |
| Register allocation via clique separators [155] | ACM | PLDI | C | 1989 | A, E |
| Fast interprocedural alias analysis [156] | ACM | POPL | C | 1989 | A, E, O, S |
| Coloring heuristics for register allocation [157] | ACM | PLDI | C | 1989 | A, E, O |
| More iteration space tiling [158] | ACM/IEE | SC | C | 1989 | A, S |
| Data dependence analysis on multi-dimensional array references [159] | ACM | ICS | C | 1989 | O, S |

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| Spill code minimization techniques for optimizing compilers [160] | ACM | PLDI | C | 1989 | A, E |
| Customization: Optimizing compiler technology for SELF, a dynamically-typed OOP language [161] | ACM | PLDI | C | 1989 | O, S |
| An efficient method of computing static single assignment form [162] | ACM | POPL | C | 1989 | A, O |
| An approach to ordering optimizing transformations [163] | ACM | PPoPP | C | 1990 | A |
| Register allocation across procedure and module boundaries [164] | ACM | PLDI | C | 1990 | A |
| Region Scheduling: An Approach for Detecting and Redistributing Parallelism [165] | IEEE | TSE | J | 1990 | E |
| Constructing the procedure call multigraph [166] | IEEE | TSE | J | 1990 | O |
| On the perfect accuracy of an approximate subscript analysis test [167] | ACM | CAN | J | 1990 | O |
| Structured dataflow analysis for arrays and its use in an optimizing compiler [168] | Wiley | Software: Practice and Experience | J | 1990 | O |
| Compilation of Haskell array comprehensions for scientific computing [169] | ACM | PLDI | C | 1990 | S |
| How to read floating point numbers accurately [170] | ACM | PLDI | C | 1990 | S |
| How to print floating-point numbers accurately [171] | ACM | PLDI | C | 1990 | S |
| Profile guided code positioning [172] | ACM | PLDI | C | 1990 | S |
| Updating distributed variables in local computations [173] | Wiley | SPE | J | 1990 | S |
| An interval-based approach to exhaustive and incremental interprocedural data-flow analysis [174] | ACM | TOPLAS | J | 1990 | E, O |
| The priority-based coloring approach to register allocation [175] | ACM | TOPLAS | J | 1990 | A, D, E, S |
| Improving register allocation for subscripted variables [176] | ACM | PLDI | C | 1990 | A, E, M, O, S |
| Analysis of pointers and structures [177] | ACM | PLDI | C | 1990 | A, E |
| Loop distribution with arbitrary control flow [178] | ACM | PLDI | C | 1990 | O, S |
| Graph coloring register allocation for processors with multi-register operands [179] | ACM | PLDI | C | 1990 | A, E |
| Register allocation via hierarchical graph coloring [180] | ACM | PLDI | C | 1991 | A |
| Circular scheduling: a new technique to perform software pipelining [181] | ACM | PLDI | C | 1991 | A |
| Efficient DAG construction and heuristic calculation for instruction scheduling [182] | ACM | MICRO | W | 1991 | E |
| A composite algorithm for strength reduction and code movement optimization [183] | Springer | ACIS | J | 1991 | E |
| Efficiently computing static single assignment form and the control dependence graph [184] | ACM | TOPLAS | J | 1991 | M |
| Software prefetching [185] | ACM | ASPLOS | C | 1991 | O |
| Compiling global name-space parallel loops for distributed execution [186] | IEEE | TPDS | J | 1991 | O |
| An implementation of interprocedural bounded regular section analysis [187] | ACM | TPDS | J | 1991 | O |
| Limits of instruction-level parallelism [188] | ACM | ASPLOS | C | 1991 | S |
| Uniform techniques for loop optimization [189] | ACM | ICS | C | 1991 | S |
| A data locality optimizing [190] | ACM | PLDI | C | 1991 | A, D, M, O |
| Constant propagation with conditional branches [191] | ACM | TOPLAS | J | 1991 | A, E, M, O, S |
| Efficient and exact data dependence analysis [192] | ACM | PLDI | C | 1991 | A, D, O |
| Efficiently computing static single assignment [193] | ACM | TOPLAS | J | 1991 | A, D, E, O |
| Global instruction scheduling for superscalar machines [194] | ACM | PLDI | C | 1991 | A, D, E |
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| A loop transformation theory and an algorithm to maximize parallelism [197] | IEEE | TPDS | J | 1991 | O, S |
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| Optimization of array accesses by collective loop transformations [199] | ACM | SC | C | 1991 | D, O |
| Interprocedural transformations for parallel code generation [200] | ACM/IEE | SC | C | 1991 | O, S |
| Practical dependence testing [201] | ACM | PLDI | C | 1991 | A, O |
| Procedure merging with instruction caches [202] | ACM | PLDI | C | 1991 | A, S |
| An experiment with inline substitution [203] | Wiley | SPE | J | 1991 | E, S |
| Integrating scalar optimization and parallelization [204] | Springer | LCPC | C | 1992 | A |
| Sharlit—a tool for building optimizers [205] | ACM | PLDI | C | 1992 | A |
| How to analyze large programs efficiently and informatively [206] | ACM | PLDI | C | 1992 | A |
| Compiler code transformations for superscalar-based high performance systems [207] | IEEE | SC | C | 1992 | A |
| Engineering a simple, efficient code-generator generator [208] | ACM | TOPLAS (LOPLAS) | J | 1992 | D |
| Some efficient solutions to the affine scheduling problem. I. One-dimensional time [209] | Elsevier | JPP | J | 1992 | D |
| Avoiding unconditional jumps by code replication [210] | ACM | PLDI | C | 1992 | E |
| Rematerialization [211] | ACM | PLDI | C | 1992 | E |
| Coloring register pairs [212] | ACM | TOPLAS (LOPLAS) | J | 1992 | E |
| Optimizing for parallelism and data locality [213] | ACM | SC | C | 1992 | O |
| Maximizing loop parallelism and improving data locality via loop fusion and distribution [214] | ACM | LCPC | W | 1992 | O |
| Beyond induction variables [215] | ACM | PLDI | C | 1992 | O |
| Efficient call graph analysis [216] | ACM | TOPLAS (LOPLAS) | J | 1992 | O |
| A safe approximate algorithm for interprocedural aliasing [217] | ACM | PLDI | C | 1992 | O |
| Relaxing SIMD control flow constraints using loop transformations [218] | ACM | PLDI | C | 1992 | S |
| Unexpected side effects of inline substitution: a case study [219] | ACM | TOPLAS (LOPLAS) | J | 1992 | S |
| Eliminating false positives using the omega test [220] | ACM | PLDI | C | 1992 | A, D, O |
| Lazy code motion [221] | ACM | PLDI | C | 1992 | A, D, E |
| Software support for speculative loads [222] | ACM | ASPLOS | C | 1992 | A, E |
| A practical algorithm for exact array dependence analysis [223] | ACM | CACM | J | 1992 | O, S |
| Array privatization for parallel execution of loops [224] | ACM | ICS | C | 1992 | O, S |
| The power test for data dependence [225] | IEEE | TCO | J | 1992 | A, S |
| Eliminating branches using a superoptimizer and the GNU C compiler [226] | ACM | PLDI | C | 1992 | E, S |
| Design and evaluation of a compiler algorithm for prefetching [227] | ACM | ASPLOS | C | 1992 | D, O |
| Dependence-based program analysis [228] | ACM | PLDI | C | 1993 | A |
| A variation of Knoop, Rüthing, and Steffen’s lazy code motion [229] | ACM | PLDI | C | 1993 | E |
| Lazy strength reduction [230] | C&H | JPL | J | 1993 | A, E |
| Collective loop fusion for array contraction [231] | Springer | LCPC | C | 1993 | O |
| Interprocedural constant propagation: an empirical study [232] | ACM | TOPLAS (LOPLAS) | J | 1993 | O |
| Symbolic analysis: A basis for parallelization, optimization, and scheduling of programs [233] | Springer | LCPC | W | 1993 | O |
| Array-data flow analysis and its use in array privatization [234] | ACM | POPL | C | 1993 | S |
| Automatic array alignment in data-parallel programs [235] | ACM | POPL | C | 1993 | S |

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| Instruction-Level Parallel Processing: History, Overview, and Perspective [237] | Springer | JSC | J | 1993 | S |
| A practical system for intermodule code optimization at link-time [238] | C&H | JPL | J | 1993 | A |
| Loop-level parallelism in numeric and symbolic programs [239] | IEEE | TPDS | J | 1993 | S |
| Orchestrating interactions among parallel computations [240] | ACM | PLDI | C | 1993 | S |
| The superblock: an effective technique for VLIW and superscalar compilation [241] | Springer | JSC | J | 1993 | S |
| Optimizing array bound checks using flow analysis [242] | ACM | PLDI | C | 1993 | A, E |
| Register allocation with instruction scheduling [243] | ACM | PLDI | C | 1993 | A, E |
| A methodology for procedure cloning [244] | Elsevier | COLA (COMLAN) | J | 1993 | A, O, S |
| Efficient flow-sensitive interprocedural computation of pointer-induced aliases and side effects [245] | ACM | POPL | C | 1993 | E, O, S |
| Automatic array privatization [246] | Springer | LCPC | W | 1993 | O, S |
| Interprocedural modification side effect analysis with pointer aliasing [247] | ACM | PLDI | C | 1993 | M, S |
| Branch prediction for free [248] | ACM | PLDI | C | 1993 | A, M |
| Link-time optimization of address calculation on a 64-bit architecture [249] | ACM | PLDI | C | 1994 | A |
| Effective partial redundancy elimination [250] | ACM | PLDI | C | 1994 | A |
| Partial dead code elimination [251] | ACM | PLDI | C | 1994 | A |
| A general data dependence test for dynamic, pointer-based data structures [252] | ACM | PLDI | C | 1994 | A |
| Instruction scheduling over regions: A framework for scheduling across basic blocks [253] | Springer | CC | C | 1994 | A |
| Value dependence graphs: representation without taxation [254] | ACM | POPL | C | 1994 | A |
| Zero-cost range splitting [255] | ACM | PLDI | C | 1994 | E |
| Reducing branch costs via branch alignment [256] | ACM | OSR | J | 1994 | E |
| Improving the ratio of memory operations to floating-point operations in loops [257] | ACM | TOPLAS | J | 1994 | M |
| Optimizing multi-method dispatch using compressed dispatch tables [258] | ACM | OOPSLA | C | 1994 | M |
| Improving the accuracy of static branch prediction using branch correlation [259] | ACM | ASPLOS | C | 1994 | M |
| A compiler framework for restructuring data declarations to enhance cache and TLB effectiveness [260] | IEEE | CASCON | C | 1994 | S |
| False sharing and spatial locality in multiprocessor caches [261] | IEEE | TCO | J | 1994 | S |
| Reassociation and strength reduction [262] | ACM | SCO | C | 1994 | S |
| The alignment-distribution graph [263] | Springer | LCPC | W | 1994 | S |
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| Context-sensitive interprocedural points-to analysis in the presence of function pointers [265] | ACM | PLDI | C | 1994 | D, E |
| Interprocedural may-alias analysis for pointers: beyond k-limiting [266] | ACM | PLDI | C | 1994 | A, E |

Table 1: The papers from *Advanced Compiler Design and Implementation* [1] (A), *Compilers: Principles, Techniques, and Tools* [2] (D), *Engineering a Compiler* [3] (E), *Modern Compiler Implementation in C/Java/ML* [4–6] (M), *Optimizing Compilers for Modern Architectures: A Dependence-Based Approach* [7] (O), and the Bacon’s survey [8] (S). In the **Type** column, C stands for conference, J for journal, and W for workshop.

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