Programming Parallel Computers

Links to external resources

Hardware

- Agner Fog: **Instruction tables** — the instruction latencies and throughputs for Intel CPUs
- **Intel Skylake microarchitecture** in WikiChip

OpenMP

- **OpenMP specification**

SIMD

- **GCC vector extensions**
- **Clang vector extensions**
- **posix_memalign** — allocating memory with a specific alignment

CUDA

- NVIDIA: **CUDA documentation**

OpenCL [optional]

- Khronos: **OpenCL specification**

Rust programming language [optional]

- Matias Lindgren: **Rust and C++, a performance comparison** — Rust implementations of the examples from **Chapter 2**

Low-level programming techniques [advanced]

- **Intel Intrinsics Guide**
- **GCC: x86 built-in functions**
- **GCC: other built-in functions**
- Sean Eron Anderson: **Bit Twiddling Hacks**