

Software Performance Engineering

Lecture 5: Vectorization

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| 1. | Loop with unknown trip count | https://www.godbolt.org/z/MacxsGWsv |
| 2. | Cannot prove independence | https://www.godbolt.org/z/8fYcPz3Wv |
| 3. | Loop carried dependences | https://www.godbolt.org/z/z146WG3de |
| 4. | Reductions | https://www.godbolt.org/z/4n8zEbbsT |
| 5. | Control-flow | https://www.godbolt.org/z/jojKnEnv4 |
| 6. | Non-contiguous data | https://www.godbolt.org/z/PzYc9jqaf
https://www.godbolt.org/z/ME15GTesM |
| 7. | Cost model failures | https://www.godbolt.org/z/r5szGsaK4 |
| 8. | Vectorization of function calls | https://www.godbolt.org/z/5Mcq9Pors |
| 9. | Different hardware versions | https://www.godbolt.org/z/Pvn1KM3rx |

Intel Intrinsic Guide

See <https://llvm.org/docs/Vectorizers.html> for more info.