In wisdom gathered over time I have found that every experience is a form of exploration.
- Ansel Adams
Introduction

› How do we measure performance?
› What tools can we use to explore a design space?
› What is the impact of VLSI technology on FPGA design?
› Technology trends influence architecture. Can we understand how they change with time?
› Case study
  - Matrix multiplication
› Understand what needs to be optimised (and what doesn’t)
› Tradeoff between speed, area, latency, throughput, energy, cost, accuracy …
  - Cannot optimise them all, e.g. usually can increase speed if cost unimportant
› Good design is a tradeoff