Summary

- Data movement rather than computation is the key challenge
- Silicon photonics: emerging commercial ecosystem
- Bandwidth Density + Energy Efficiency
 - Si photonics can get to 1 Tb/s per pin at 1 pJ/bit system wide
- Photonic switching is key to realizing system benefits of optical interconnection networks beyond "wire replacement"
- Optical networks are fundamentally different: require Holistic co-design of software-architecture-interconnect.