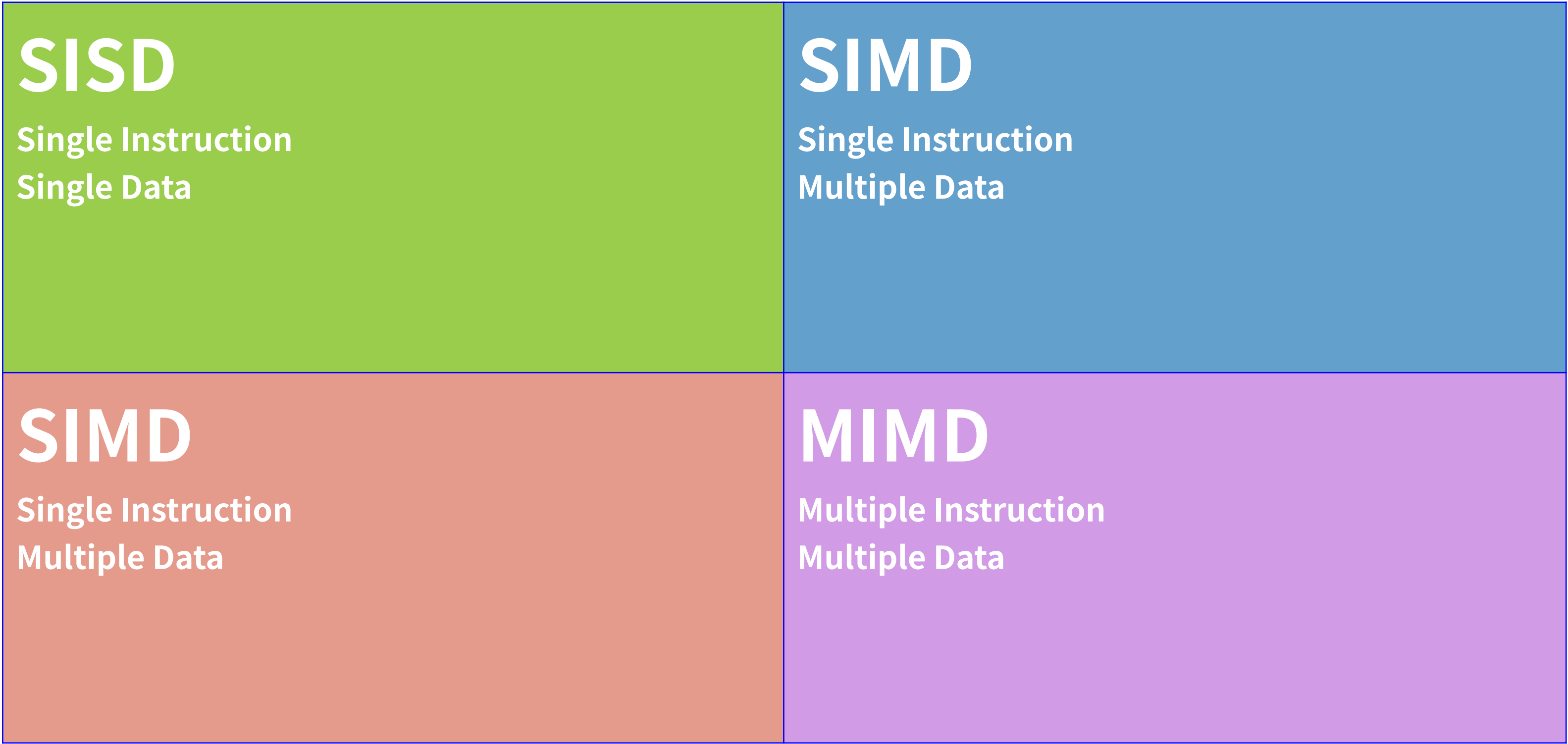




SITCON '21

FALLYNN'S CLASS IS A TAXONOMY



# SISD

Single Instruction  
Single Data

# SIMD

Single Instruction  
Multiple Data

# SIMD

Single Instruction  
Multiple Data

# MIMD

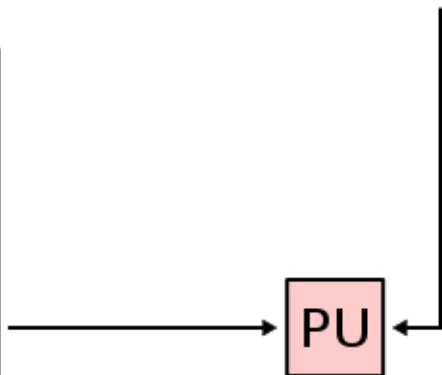
Multiple Instruction  
Multiple Data

SISD

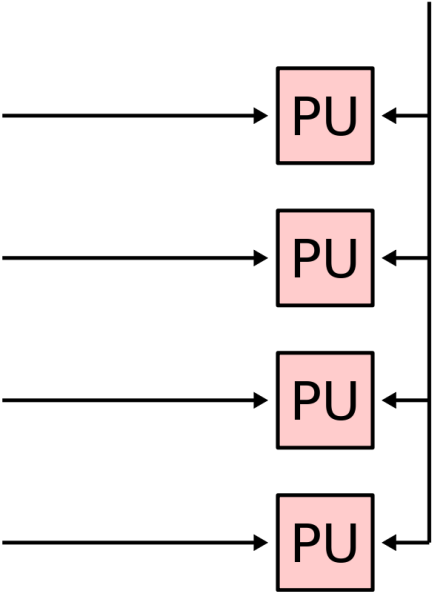
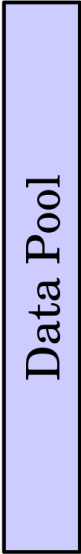
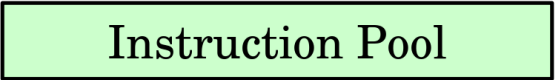
Instruction Pool

Data Pool

PU



SIMD



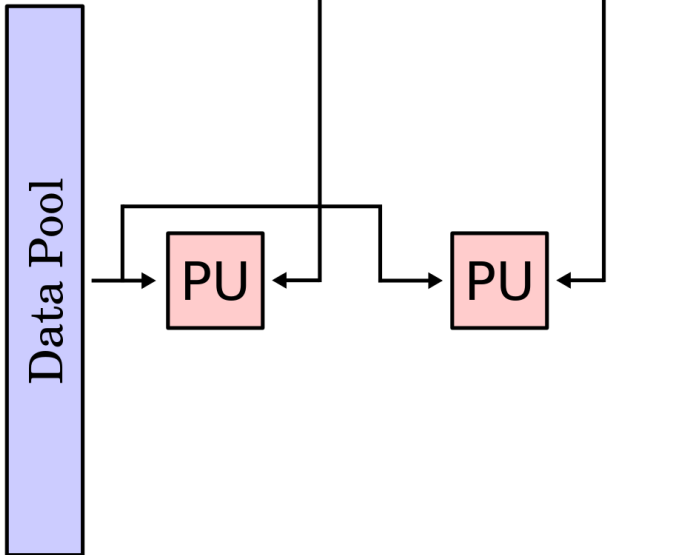
MISD

Instruction Pool

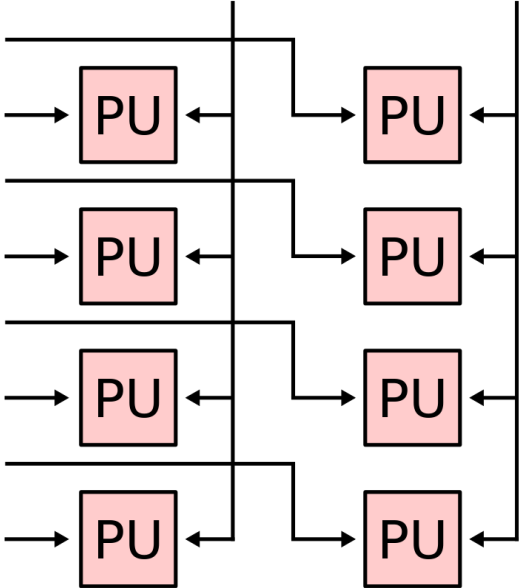
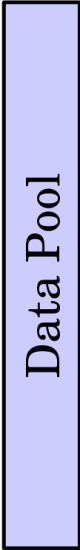
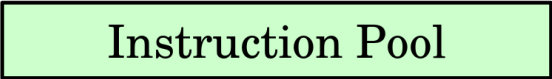
Data Pool

PU

PU



MIMD







CRU

GPU

Vector Processor

# FLYNN'S CLASSIC TAXONOMY

## SISD

Single Instruction  
Single Data

CPU

SISD

Instruction Pool

Data Pool

PU

## SIMD

Single Instruction  
Multiple Data

GPU

Vector Processor

SIMD

Instruction Pool

Data Pool

PU

PU

PU

PU

## SIMD

Single Instruction  
Multiple Data

MISD

Instruction Pool

Data Pool

PU

PU

## MIMD

Multiple Instruction  
Multiple Data

MIMD

Instruction Pool

Data Pool

PU

PU

PU

PU

PU

PU

PU

PU



SITCON '21

# EXECUTION MODEL

Software

Hardware



SITCON '21