

Computer Architecture Group

Robert Mullins

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Challenges

- Technology scaling will continue to provide us with greater numbers of faster transistors but...
 - **Power**
 - **Process Variation**
 - **Security**
 - **Complexity**
 - **Communication**
- ...and we also need to deliver real system-level performance gains?

Research Projects

Auto-parallelising and optimising compilers

Data centre architectures and networks

Secure hardware

Parallel computer architecture

Processor architecture

On-chip networks

VLSI Design

People



Timothy Jones

Automatic
parallelisation,
fault detection
and mitigation,
cache design



Andrew Moore

Electrical and
photonic
networks
(+SRG)



Simon Moore

Neural network
simulation,
secure
hardware

People



David Greaves

System specification,
power estimation,
hardware synthesis
(+*SRG* and +*CPRG*)



Robert Mullins

Chip
multiprocessors,
on-chip networks,
fault tolerant
processors



Alan Mycroft

Languages and
compilers, static
analysis of
programs
(+*CPRG*)

Questions?

- Please come and chat if you are interested:

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