

# Distributed and Pervasive Systems

## Team 2

Report  
Aarhus University, Science and Technology  
Lector: Christian Fischer Pedersen

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Name	Study number	Signature
David Jensen	11229	
Henrik Bagger Jensen	201304157	
Ólafur Dagur Skúlason	IY11249	
Titas Urbonas	201700321	
Christian Lillelund	201408354	

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## Chapter 1

# Introduction



## Chapter 2

# Real-Time Computing

Topics/keywords:

Jobs & schedulers & task handling

### 2.1 Determinism

- Finite automata for determined/undetermined systems Short intro, an example

DFA

NFA

TFA

Compare deterministic and non-deterministic automata Talk about timed automatas and how they comply with deadlines

### 2.2 Scheduling

- Introduction Arrival time, release time, deadlines Real-time computing What are jobs? Tasks? Have the basic definition written down (at least the Task/J one)

- Schedulers Put in illustrations/drawings from exercises. We need a few examples Rate-monotonic scheduler Deadline-first scheduler Least-slacktime-first scheduler

- Resource control Write about resource control/deadlock Priority inheritance Priority ceiling Find Søren Hansen (grandmaster) drawings/references



## Chapter 3

# Synchronization





## Chapter 4

# Real-Time Ethernet



## Chapter 5

# Middleware



## Chapter 6

# Consistency



## Chapter 7

# Fault Tolerance





## Chapter 8

# Leader Election



## Chapter 9

# Positioning



## Chapter 10

## Discussion



## **Chapter 11**

## **Conclusion**





## Chapter 12

# Perspectives



## Chapter 13

## References

