

# PhD Application for The PhD Thesis "Decentralized Fog Computing Infrastructure Control"

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Audition, 8<sup>th</sup> of June, 2017

# Outline

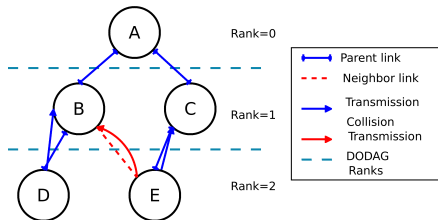
- 1 Personal Presentation
- 2 Master Thesis
- 3 State of Art for Edge Clouding
- 4 PhD Topic
- 5 Project Perspective

- A double diploma student.
  - Engineering diploma in telecommunication and computer science - Lebanese University, Faculty of engineering (Home University).
  - Master's degree in Informatics Grenoble (MoSIG) Parallel, Distributed Systems Track - Grenoble INP, Ensimag jointly with UGA, IMAG (Host University).
- Research interest: Distributed systems, Networking.
- Master's thesis "Distributed Approach for Cross-Layer Resource Allocation in Wireless Sensor Networks" Jointly between LIG and VERIMAG.

## Internship objectives

- Improvement in the distributed 6TiSCH networks

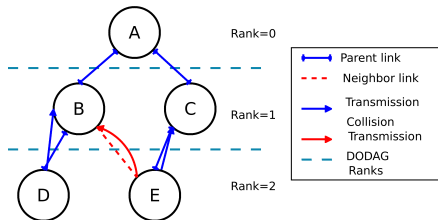
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Channel Offset	0	Shared Slot				B>A
	1		C>A			
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	3					



## Internship objectives

- Improvement in the distributed 6TiSCH networks
- Reduction of collision in TSCH Dedicated cells.

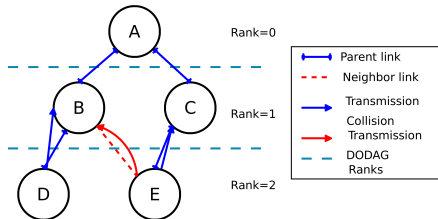
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## Internship objectives

- Improvement in the distributed 6TiSCH networks
- Reduction of collision in TSCH Dedicated cells.
- The distributed approach causing the problem.

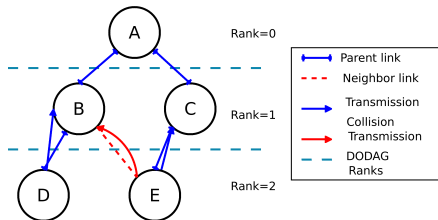
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Channel Offset	0	Shared Slot				B>A
	1		C>A			
	2		B>D		D>B E>C	
	3					



## Internship objectives

- Improvement in the distributed 6TiSCH networks
- Reduction of collision in TSCH Dedicated cells.
- The distributed approach causing the problem.
- Lack of central entity.

		Time Slot				
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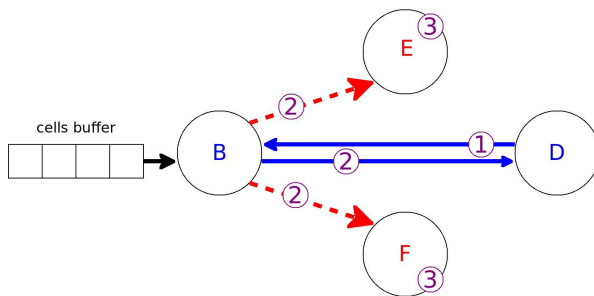
## Proposed Mechanism

- Local Mutual exclusion.



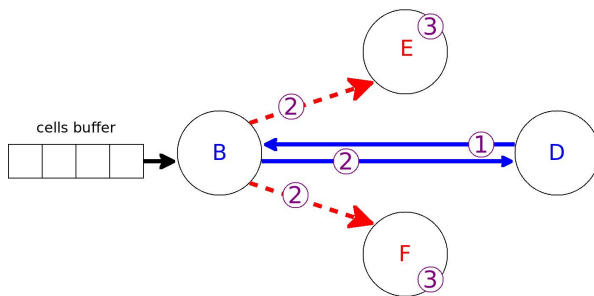
## Proposed Mechanism

- Local Mutual exclusion.
- Using already existing transaction.



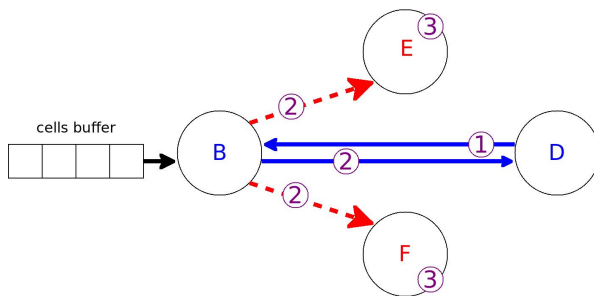
## Proposed Mechanism

- Local Mutual exclusion.
- Using already existing transaction.
- No new traffic was induced.

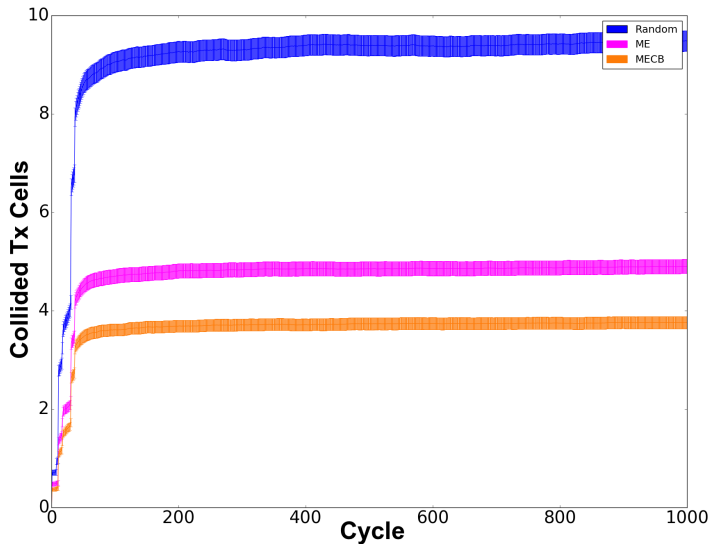


## Proposed Mechanism

- Local Mutual exclusion.
- Using already existing transaction.
- No new traffic was induced.
- Achieved 70% reduction in the colliding Tx cells.



# Internship Results



# State of Art for Edge Clouding

hey

hey

# Project Perspective

hey