Conception de logiciels Adaptés
Lieux de vie intelligent

Sébastien Mosser
INF600G - E20 - Séquence 3- Partie 4

UQÀM | Département d'informatique

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Architectures logicielles et matérielles

An Architecture to Support the Collection of Big Data in the Internet of Things

Cyril Cecchinel, Matthieu Jimenez, Sébastien Mosser, Michel Riveill

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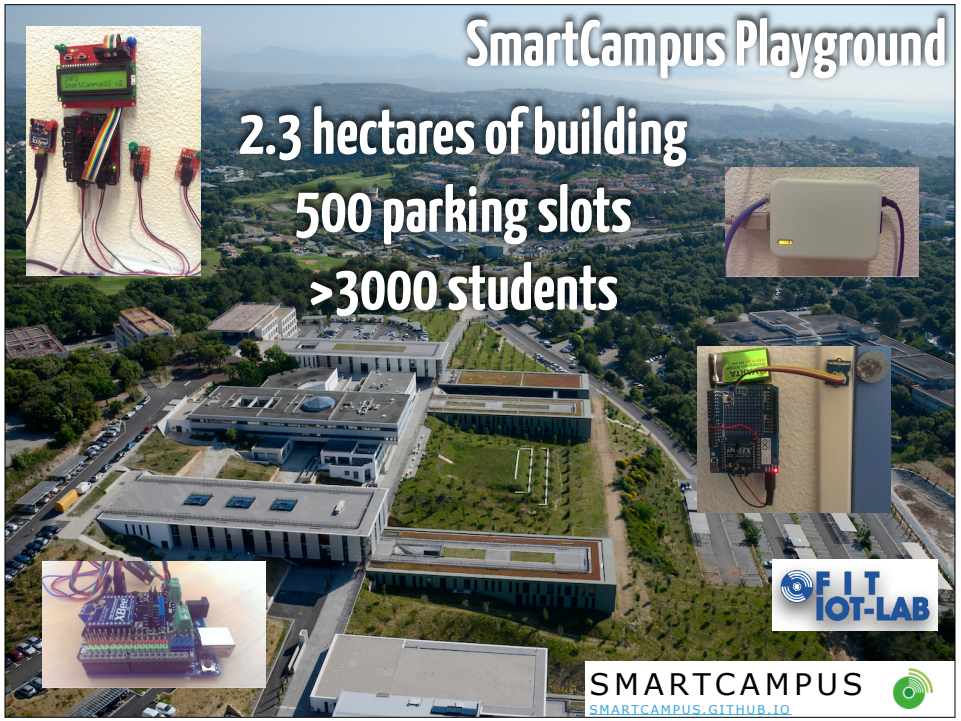

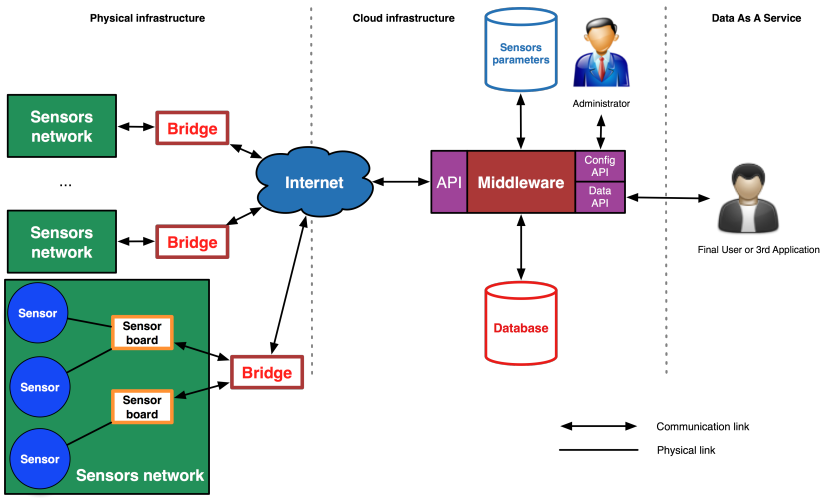

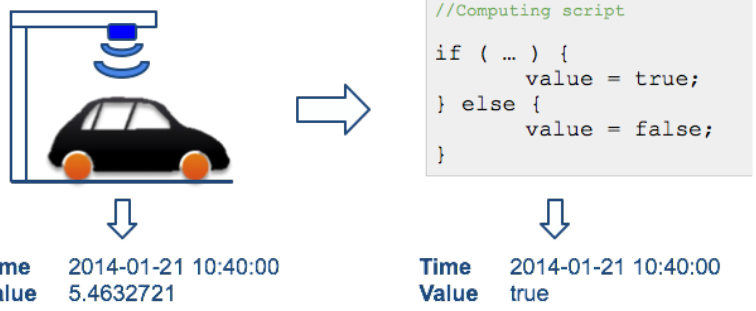

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An IoT Architecture of Microservices for Ambient Assisted Living Environments to Promote Aging in Smart Cities

Hubert Kenfack Ngankam[1(✉)], Hélène Pigot[1], Maxime Parenteau[1], Maxime Lussier[2], Aline Aboujaoudé[2], Catherine Laliberté[1], Mélanie Couture[3], Nathalie Bier[2], and Sylvain Giroux[1]

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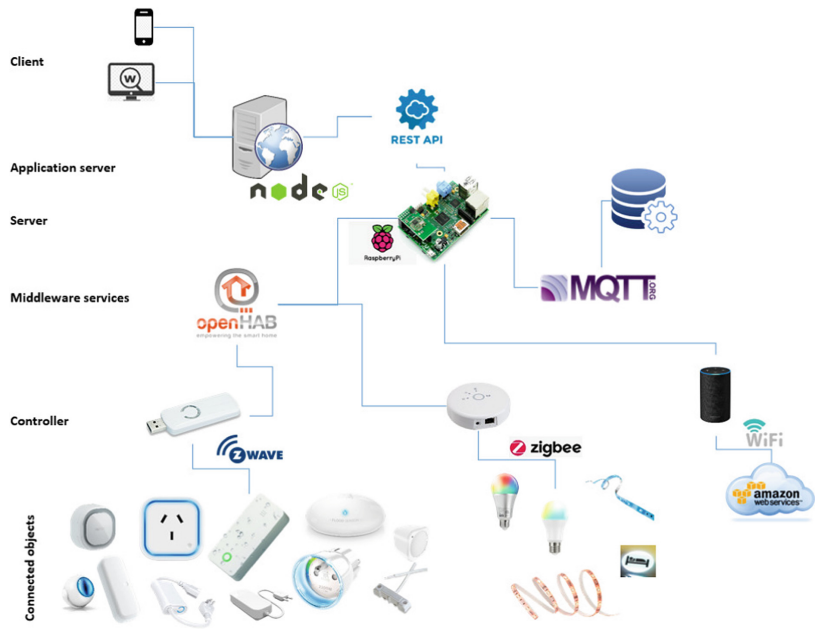

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Context awareness architecture for ambient-assisted living applications: Case study of nighttime wandering

Hubert Kenfack Ngankam[1], Hélène Pigot[1], Dominique Lorrain[2], Isabelle Viens[2] and Sylvain Giroux[1]

Figure 2. The house of experimentation.

Deployment of an IoT Solution for Early Behavior Change Detection

Hamdi Aloulou[1,2(✉)], Mounir Mokhtari[3], and Bessam Abdulrazak[4]

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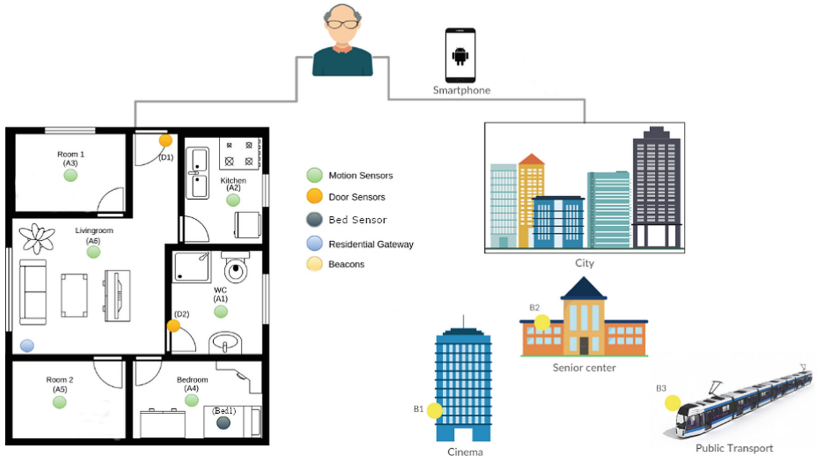

Fig. 1. Montpelier pilot site global setup

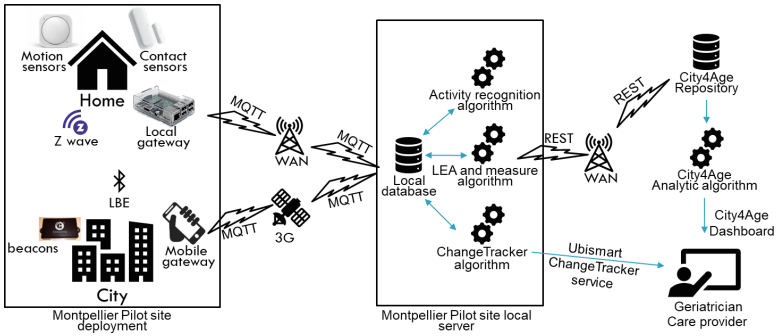

Fig. 4. Complete architecture of Montpellier pilot site's deployment

Classification

Automatic Identification of Behavior Patterns in Mild Cognitive Impairments and Alzheimer's Disease Based on Activities of Daily Living

Belkacem Chikhaoui[1(✉)], Maxime Lussier[2], Mathieu Gagnon[3], Hélène Pigot[3], Sylvain Giroux[3], and Nathalie Bier[2]

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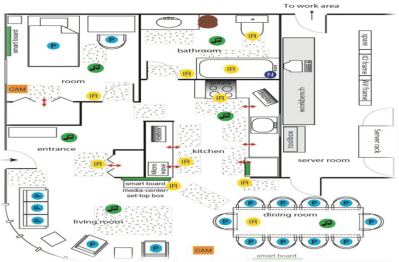
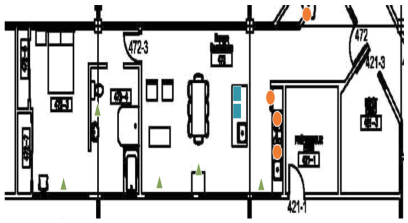


(a) Sherbrooke smart home map



(b) Montreal smart home map

Table 1. Example of sensor data collected in a smart home at Sherbrooke.

Date	Time	Sensor name	State/Value	Participant
2014-12-03	09:00:00	InfraRedSensor16	ON	MCI
2014-12-03	09:00:10	InfraRedSensor17	ON	MCI
2014-12-03	09:00:30	DoorSensor12	OPEN	MCI
2014-12-03	09:01:01	DoorSensor13	OPEN	MCI
2014-12-03	09:01:09	InfraRedSensor20	ON	MCI
2014-12-03	09:01:20	HotWaterSensor-B	ON	MCI
2014-12-03	09:01:50	ColdWaterSensor-A	ON	MCI

User	Type	F-score	User	Type	F-score	User	Type	F-score
1	Control	0.886	11	MCI	0.819	21	AD	0.984
2	Control	0.918	12	MCI	0.316	22	AD	0
3	Control	0.934	13	MCI	1	23	AD	0.91
4	Control	0.938	14	MCI	0.484	24	AD	0.976
5	Control	0.965	15	MCI	1			
6	Control	0.903	16	MCI	0.537			
7	Control	0.907	17	MCI	0			
8	Control	0.911	18	MCI	1			
9	Control	0.934	19	MCI	0.468			
10	Control	0.96	20	MCI	0.515			

Generating Bayesian Network Structures for Self-diagnosis of Sensor Networks in the Context of Ambient Assisted Living for Aging Well

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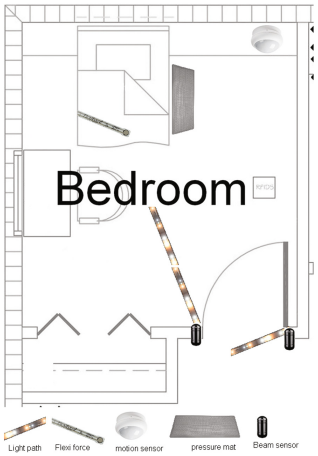

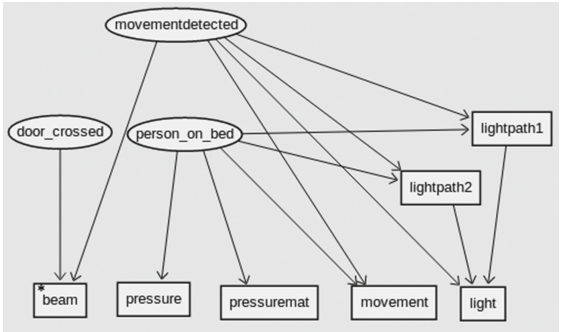

Suivi de Population

Monitoring Health Status in Long Term Care Through the use of Ambient Technologies and Serious Games

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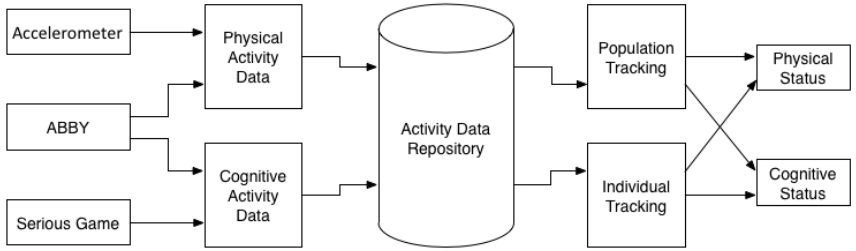

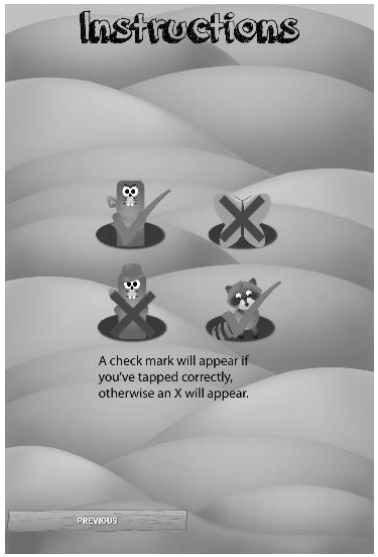

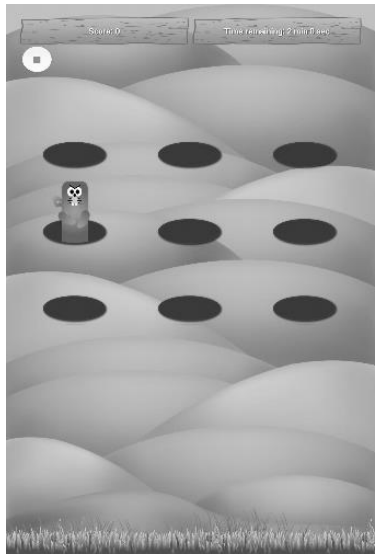

People Tracking in Ambient Assisted Living Environments Using Low-Cost Thermal Image Cameras

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