

IoTtalk: Let IoT Talk



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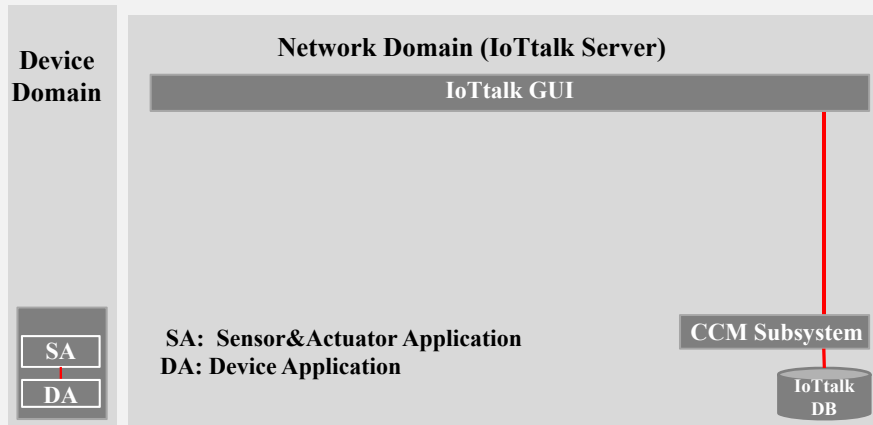
1

A simple example: to use a smart phone to control a fan



2

Create an application graphically



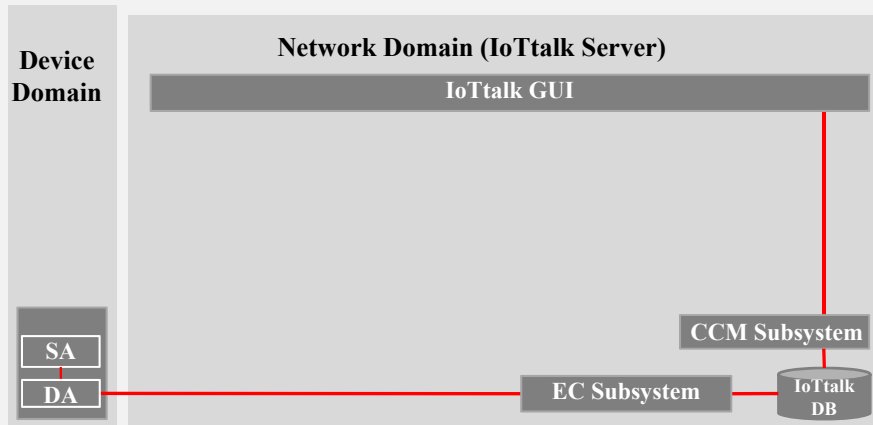
Yi-Bing Lin, Yun-Wei Lin, Chang-Yen Chih, Tzu-Yi Li, Chia-Chun Tai, Yung-Ching Wang, Fuchun Joseph Lin, Hsien Chung Kuo, Chih-Chieh Huang, Su-Chu Hsu. EasyConnect: A Management System for IoT Devices and Its Applications for Interactive Design and Art, IEEE Internet of Things Journal, 2(6):551-561, December 2015. [pdf](#)

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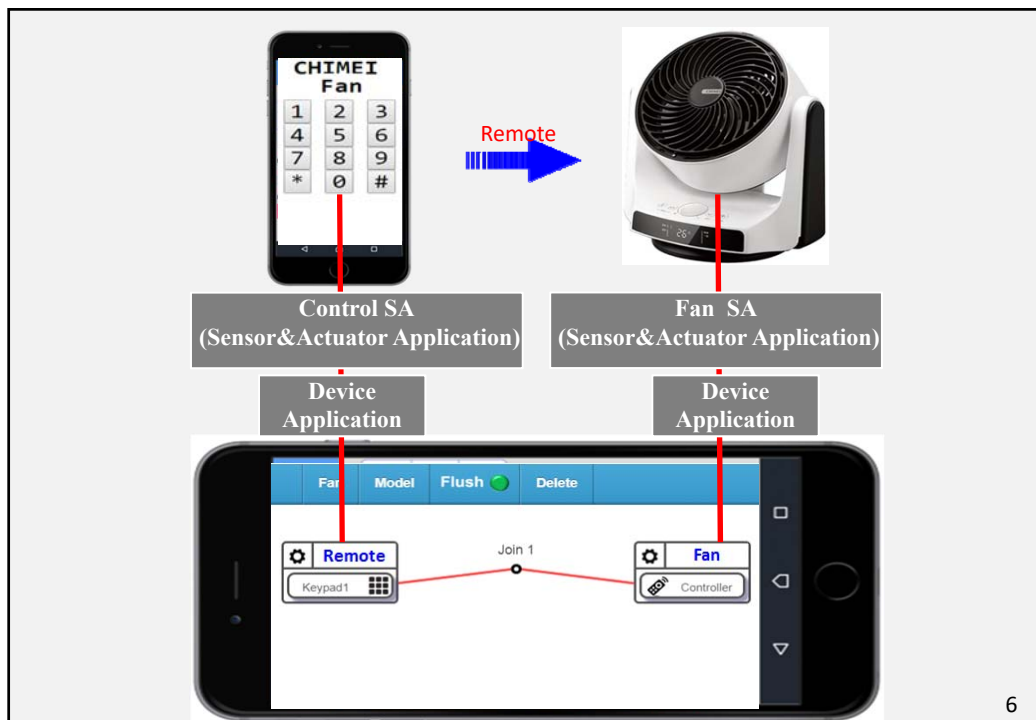
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Connect to the IoT device and execute the application



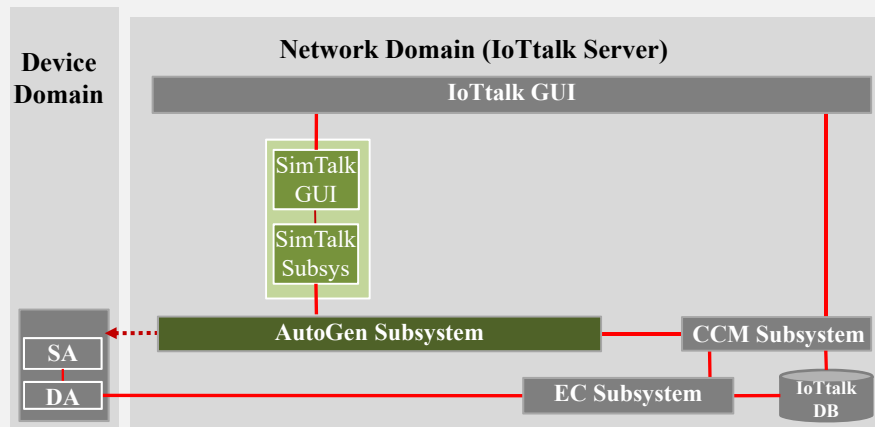
Yi-Bing Lin, Yun-Wei Lin, Chun-Ming Huang, Chang-Yen Chih, Phone Lin. IoTtalk: A Management Platform for Reconfigurable Sensor Devices. IEEE Internet of Things Journal, 4(5) 1552-1562, October, 2017. [pdf](#)

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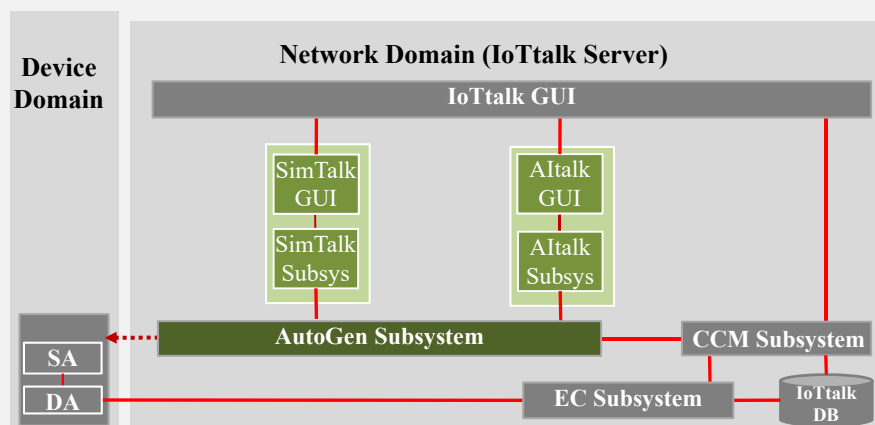
To make sure correct implementation for the application



Yun-Wei Lin, Yi-Bing Lin, Tai-Hsiang Yen. SimTalk: Simulation of IoT Applications. Accepted and to appear in Sensors. [pdf](#)

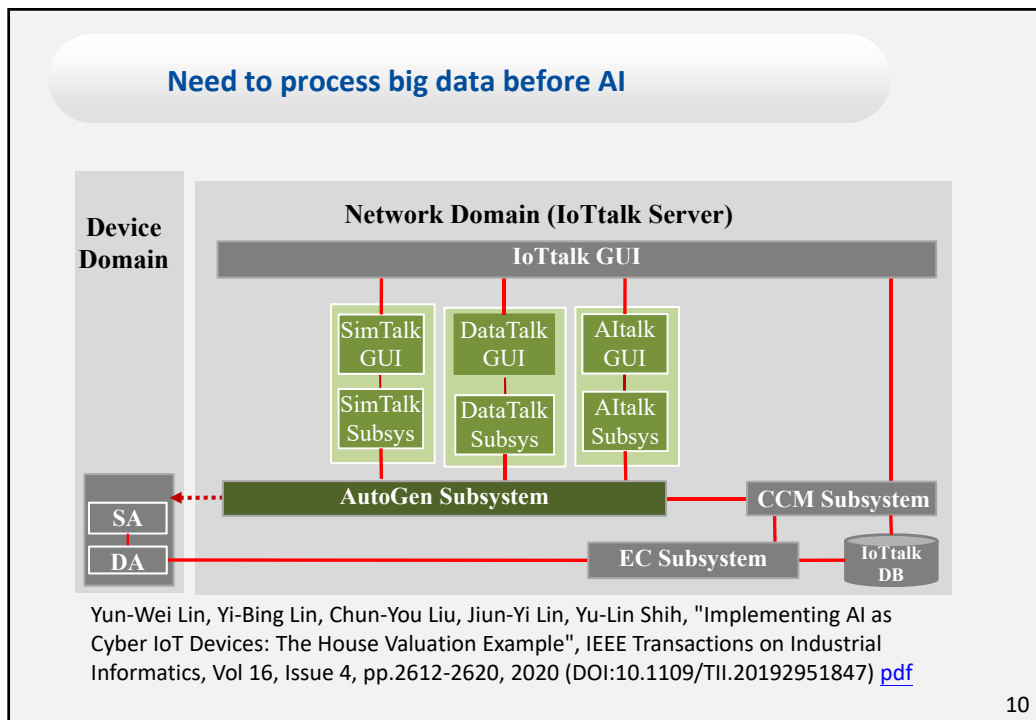
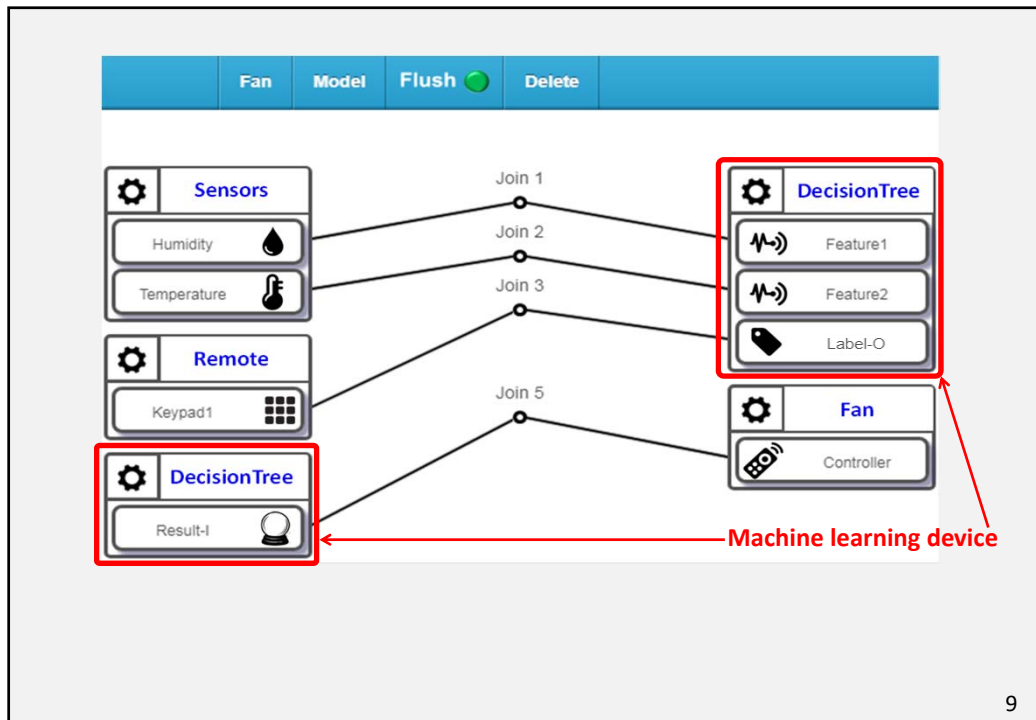
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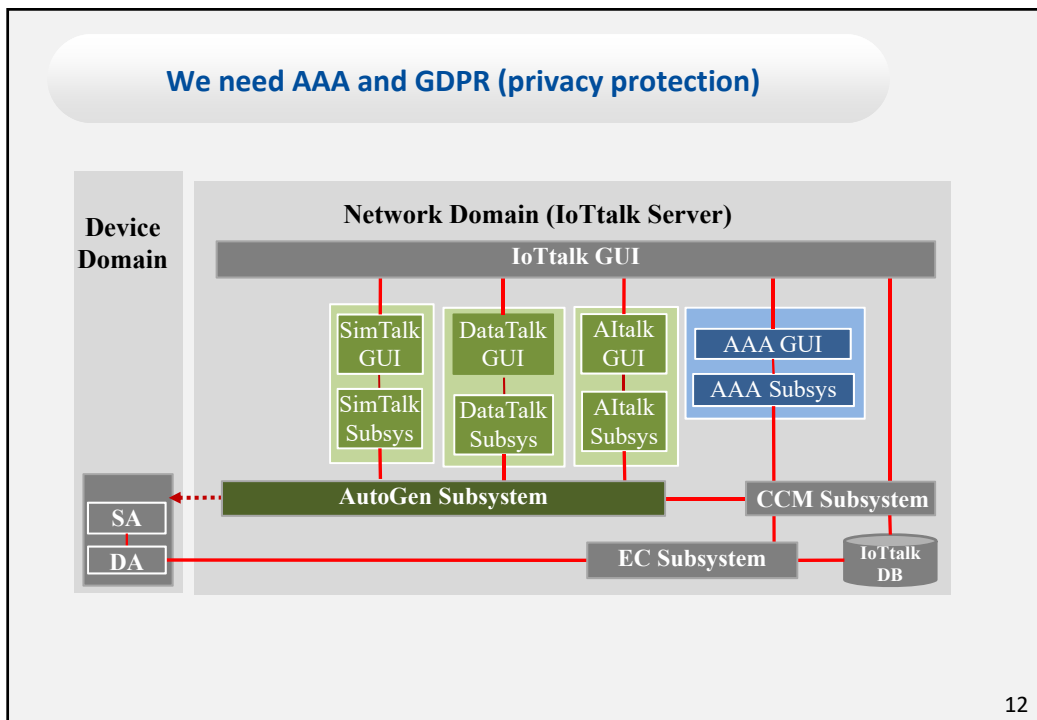
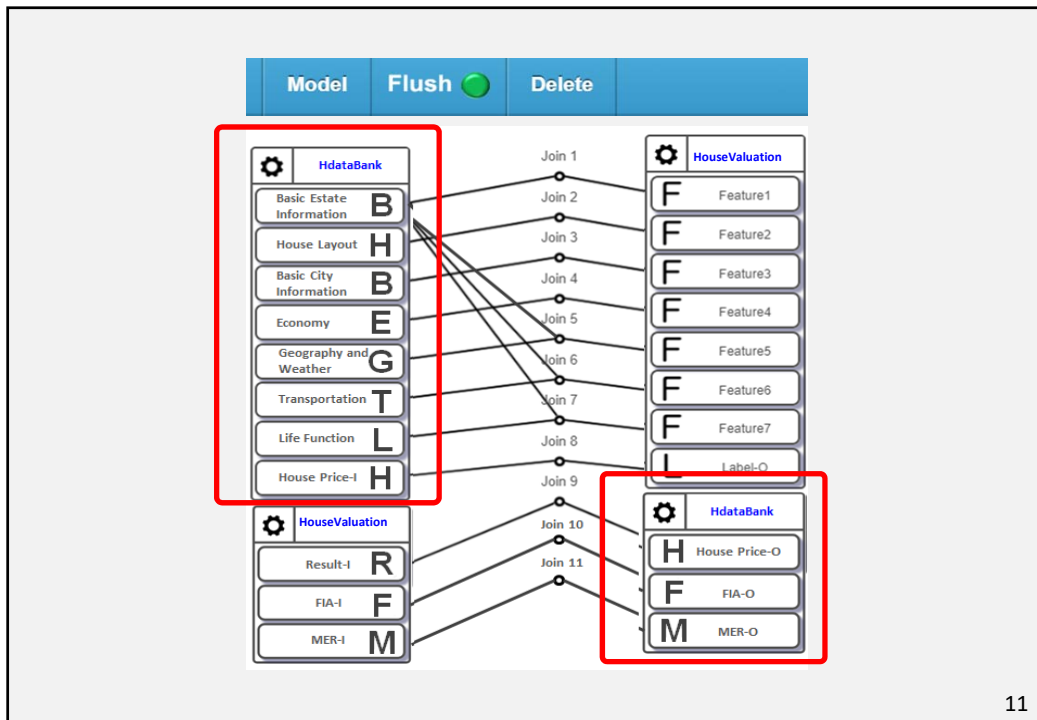
Need AI for prediction



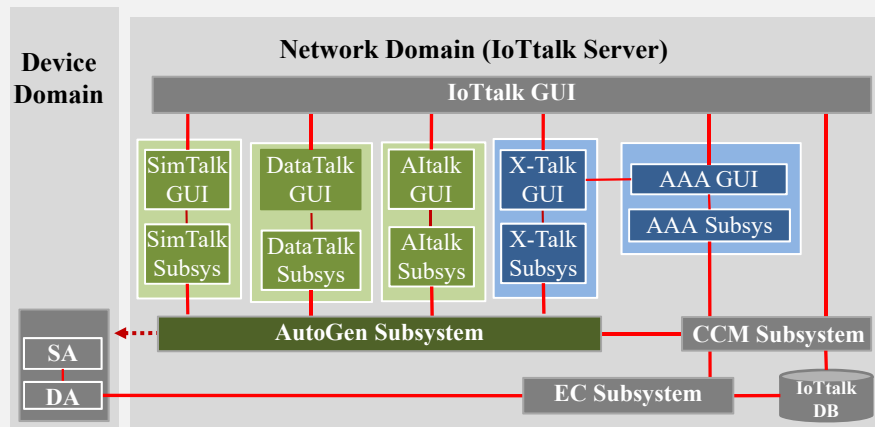
Yun-Wei Lin, Yi-Bing Lin, and Chun-You Liu, "Altalk: A Tutorial to Implement AI as IoT Devices", IET Networks, Vol. 8, Issue 3, pp. 195 - 202, 2019. (DOI:10.1049/iet-net.2018.5182) [pdf](#)

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Extend the IoT applications into IoT platforms



Yi-Bing Lin, Hung-Chun Tseng, Yun-Wei Lin and Ling-Jyh Chen, "NB-IoTtalk: A Service Platform for Fast Development of NB-IoT Applications", IEEE Internet of Things Journal, Vol.6, Issue 1, pp.928-939, February, 2019. (DOI:[10.1109/JIOT.2018.2865583](https://doi.org/10.1109/JIOT.2018.2865583)) [pdf](#)

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IoTtalk can infinitely grow with the device model list

Fan	Model	Flush	Delete	
	Qmote	Flush	Delete	
	RandNum			
	Remote_control			
	Riddle			
	SMS			
	ScratchX			
	Skeleton			
	Smartphone			
	Spring SHM			

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Improve the IoT application quality

[1]

Yi-Bing Lin, Yun-Wei Lin, Jiun-Yi Lin, Hui-Nien Hung, **SensorTalk**: An IoT Device Failure Detection and Calibration Mechanism for Smart Farming, Sensors Journal, pp. 19-21, November 2019. [pdf](#)

[2]

Archibald Blair, Min-Zheng Shieh, Yu-Hsuan Hu, Sevegnani Michele, Yi-Bing Lin, **BigraphTalk**: Verification Design of IoT Applications, IEEE Internet of Things Journal, Vol 7, Issue 4, pp.2955-2967, 2020. [pdf](#)

[3]

Yun-Wei Lin, Yi-Bing Lin, Ming-Ta Yang and Jun-Han Lin, "**ArduTalk**: An Arduino Network Application Development Platform Based on IoTtalk", IEEE Systems Journal, Vol.13, Issue 1, pp.468-476, March, 2019. [pdf](#)

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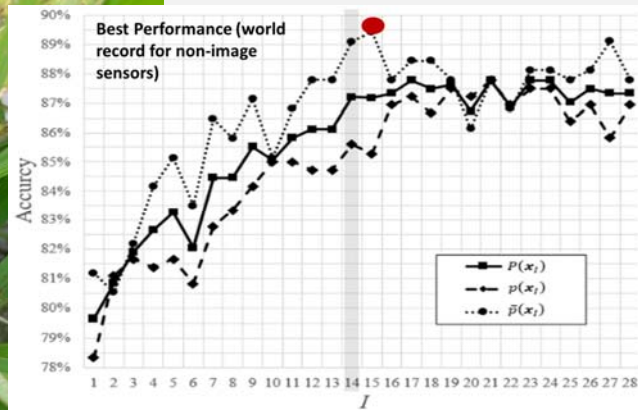
AgriTalk



Wen-Liang Chen, Yi-Bing Lin, et. al, "**AgriTalk**: IoT for Precision Soil Farming of Turmeric Cultivation", IEEE Internet of Things Journal, Vol. 6, No. 3, pp. 5209-5223, June, 2019. [pdf](#)

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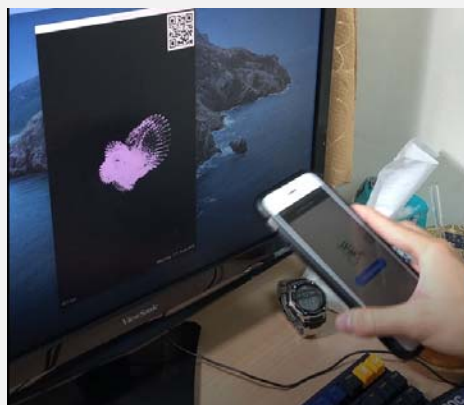
RiceTalk



Chen Wen-Liang, Yi-Bing Lin, Ng Fung-Ling, Liu Chen-You, Lin Yun-Wei, "RiceTalk: Rice Blast Detection using Internet of Things and Artificial Intelligence Technologies", IEEE IoT Journal, Vol 7, No. 2, pp.1001-1010, February, 2020. [pdf](#)

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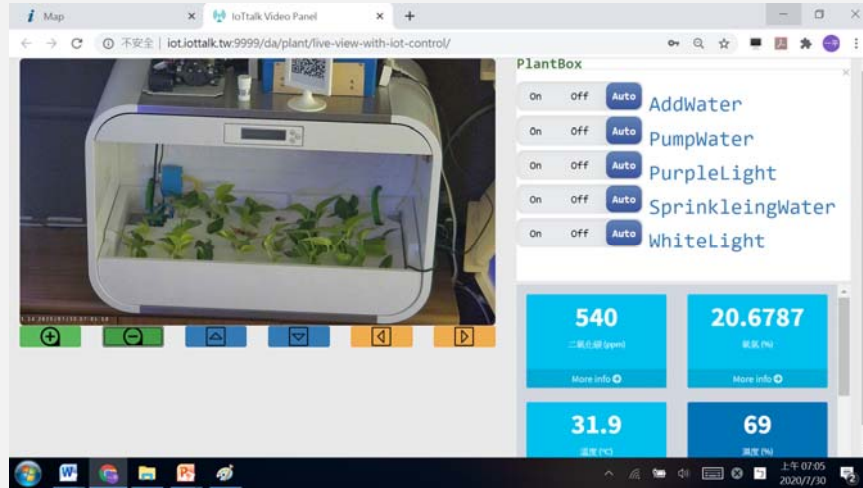
FrameTalk



Wen-Shu Lai, Yi-Bing Lin, Chung-Yun Hsiao, Li-Kuan Chen, Chao-Fan Wu and Shu-Min Lin, "FrameTalk: Human and Picture Frame Interaction through the IoT Technology", Mobile Networks and Applications Journal, First Online: 28 May 2019. [pdf](#)

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PlantTalk



Lan-Da Van, Yi-Bing Lin, Tsung-Han Wu, Yun-Wei Lin, Syuan-Ru Peng, Lin-Hang Kao and Chun-Hao Chang, "PlantTalk: A Smartphone-based Intelligent Hydroponic Plant Box", Sensors Journal, Vol. 19, No. 8, pp1763, 2019. [pdf](#)

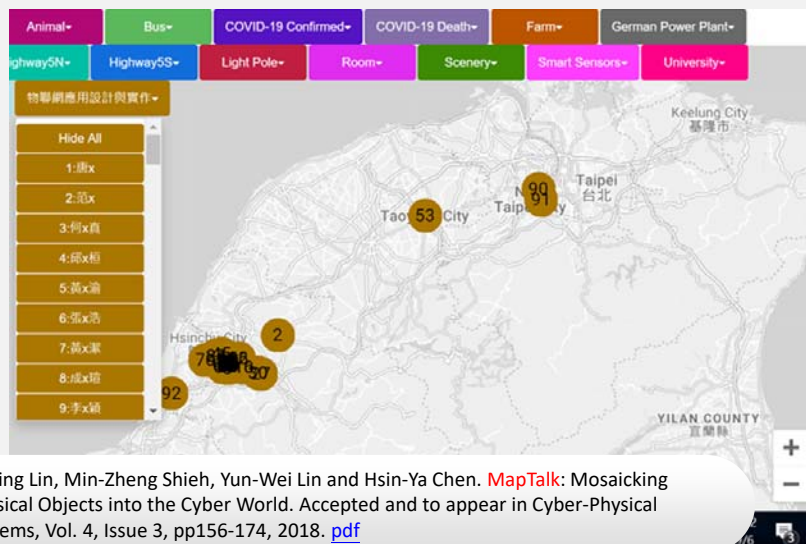
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FishTalk



Yi-Bing Lin, Hung-Chun Tseng, "FishTalk: An IoT-based Mini Aquarium System", IEEE Access, Vol.7, Issue 1, pp. 35457-35469, December, 2019. [pdf](#)

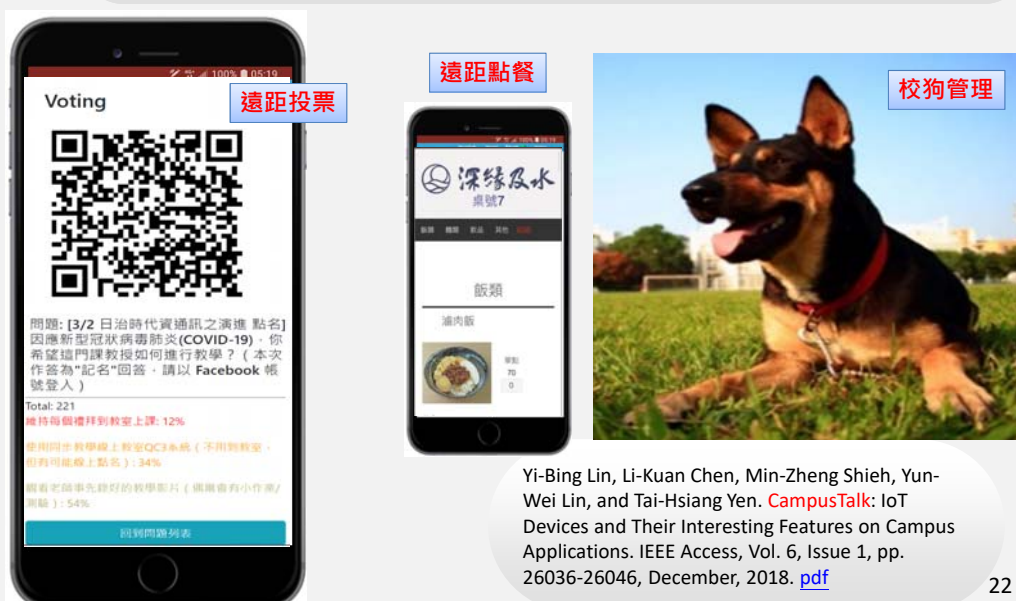
MapTalk



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CampusTalk



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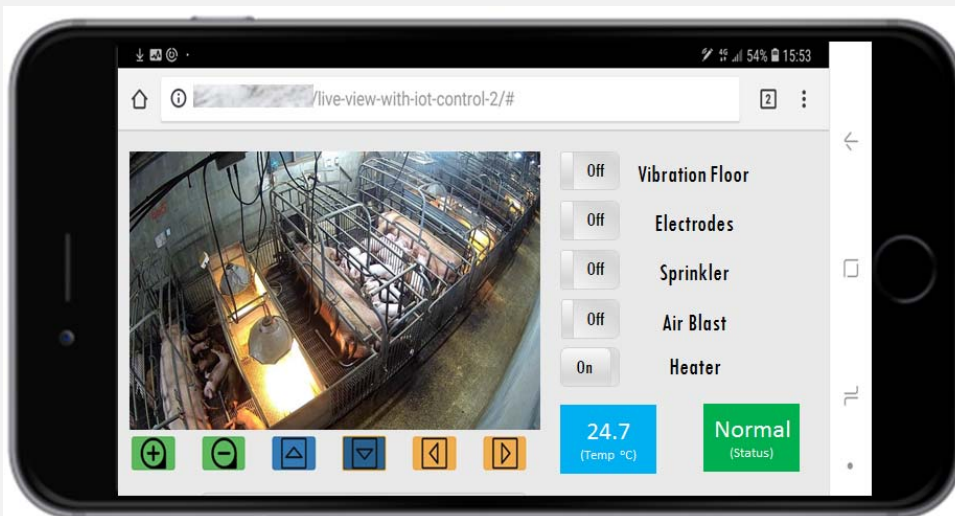
ElevatorTalk



Lan-Da Van, Yi-Bing Lin, Tsung-Han Wu, and Yu-Chi Lin, "An Intelligent Elevator Development and Management System", Accepted and to appear in IEEE Systems Journal. [pdf](#) (ElevatorTalk)

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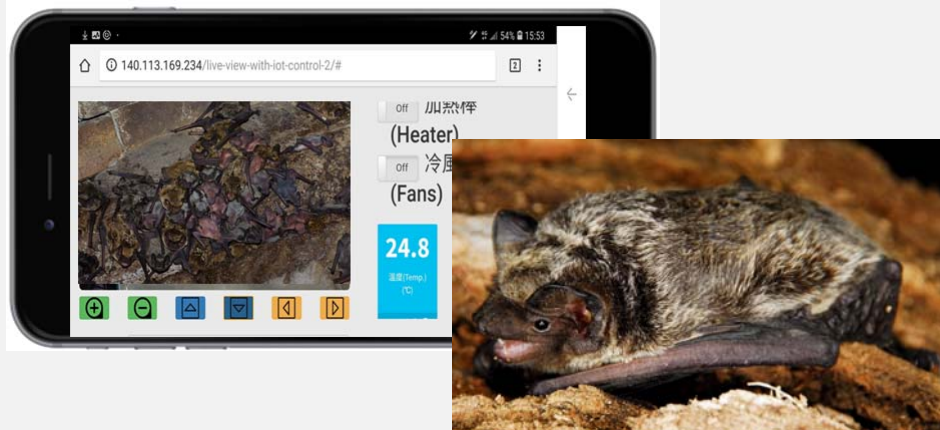
PigTalk



W. E. Chen, Y.-B. Lin, L.-X. Chen. PigTalk: an AI-based IoT Platform for Piglet Crushing Mitigation. Accepted and to appear in IEEE Transactions on Industrial Electronics. [pdf](#)

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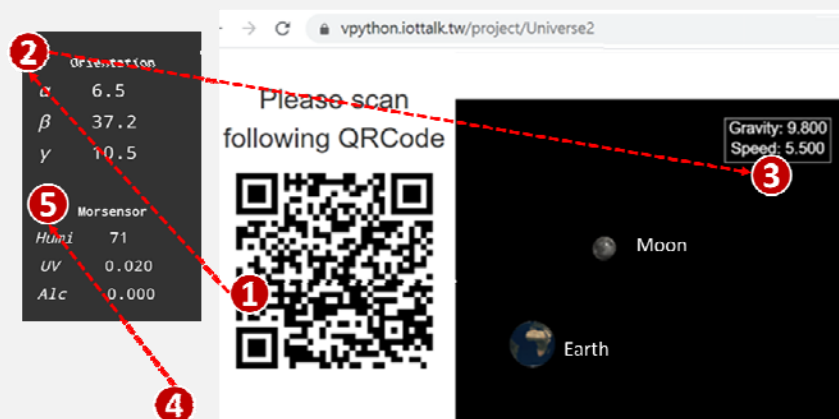
BatTalk



Yun-Wei Lin, Tai-Hsiang Yen, Cheng-Han Chou, Yi-Bing Lin, Wen-Shu Lai. Investigating Asian Parti-colored bats using the BatTalk internet of things approach. Journal of Network and Computer Applications, Volume 172, 15 December 2020, 102809. [pdf](#)

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EduTalk



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ParadeTalk



Yi-Bing Lin, Yun-Wei Lin, and Kin Hui, **ParadeTalk**: Innovative Interactions between Parade and Audiences using IoT. Accepted and to appear in IEEE Internet of Things Magazine. [pdf](#)