



[www.openiot.eu](http://www.openiot.eu)

## OpenIoT Summer School

4-8 August 2014, Galway City, Ireland

### INVITATION

The OpenIoT summer school is an event organized by the OpenIoT consortium following the EU IERC-Strategic Research and Innovation Agenda (2014 IERC IoT-SRIA) agenda, with focus on satisfying the demands for Service Openness and Semantic Interoperability for the Internet of Things.

#### OBJECTIVE

OpenIoT Summer School is an international event for talented researcher(s) across Europe and other parts of the world and it is not limited to research but open to any industry or SME interested to participate, contribute, develop and acquire the know-how about IoT technology and services based on the OpenIoT middleware.

“OpenIoT middleware is an implemented OPEN SOURCE horizontal platform to enable interoperability between IoT verticals and Data silos for a unified IoT world”.

Covering in depth a range of specialized Internet of Things related topics, from sensor networks, sensing data, stream data processing, methods and protocol implementation to service openness, interoperability, service scheduling, delivery, utility management, and their applications with focus on IoT horizontal solutions in multidisciplinary areas, (e.g. smart city, intelligent manufacturing, car2car communications, M2M, smart appliances, etc.)



## WHAT TO EXPECT

Problem analysis (case-by-case) and resolution via direct support from the experts in the area of data management, distributed systems design, ontology engineering, semantic technologies and senior researchers from academy and industry sharing best of their experiences from using OpenIoT middleware. OpenIoT has been awarded open source rookie of the year for the Internet of Things by Blackduck Software co. and is attracting many developers and IoT solution providers through the already created OpenIoT open source community.

## SUMMER SCHOOL FORMAT

OpenIoT summer school is a unique opportunity to learn directly from OpenIoT idea creators, technical experts and developers about the status, progress and plans for OpenIoT.

Open challenges in the area of Internet of Things are also part of the expected outcomes.

OpenIoT Summer School combines keynote talks lectures on fundamental and applied aspects of the Internet of Things with hands-on tutorials and experimentation, providing the participants with a solid understanding and experience to further advance research using OpenIoT middleware.

## WHY ATTEND?

The aims of the OpenIoT summer school are to:

Learn the design principles, core architectural components, basics of functionality and practical experience(s) about open source blueprint for large Scale Self-organizing Cloud Environments for Internet of Things Applications

### Design and Principles

- Overall aspects for Internet of Things.
- Core components and applied aspects for OpenIoT Architecture.
- Service Openness and Interoperability principles.
- Recent advances in the OpenIoT as open source platform.
- Important research challenges and directions for semantic interoperability.

### Technical and Hands-on

- Experimentally-driven IoT experience in the form of hands-on sessions.
- Resolution of specific Internet of Things-related problems.
- Know how on one of the flagship leading European IoT middleware(s).

### Networking

- Contact with experts in the IoT domain(s) at first class research facilities.
- Networking with IoT researchers and experienced scholars.
- Academic and industrial exchange.
- Opportunities to open discussions and round tables.
- Brainstorming, discuss and share your own ideas.
- Expand your skills and expertise on handling OpenIoT solutions.

## REGISTRATION

Please fill in the online attendance list at <http://doodle.com/ungwdb8c452rn7nr>. Also send a message via our contact form at <http://openiot.eu/?q=contact>, with Subject: *OpenIoT Summer School 2014*, and a short message about why you want to participate.

Soon after you register, we will send you an email to confirm your registration and with the instructions regarding the summer school.

## THE COST

The OpenIoT summer school participation is FREE of charge



1. Coffee Breaks: Sponsored by NUIG Insight-Galway
2. Lunch: (Tue 5<sup>th</sup> Aug, Wed 6<sup>th</sup> Aug, Thu 7<sup>th</sup> Aug and Fri 8<sup>th</sup> Aug)  
Estimated cost 10-20 Euro paid in situ with individual receipts.
3. Social Event (Wednesday 6<sup>th</sup> Aug), venue to be confirmed.  
Estimated cost 35-40 Euro paid in situ with individual receipts
4. Summer BBQ (Friday 8<sup>th</sup> August) subject to weather conditions  
Estimated cost 20-25 Euro paid in situ – No receipts provided  
(Summer BBQ is subject to voluntary organization and participation)

NOTE: is responsibility of the participants make arrangements by themselves for their accommodation (see below ACCOMMODATION for more details)

## ABOUT OpenIoT

In December 2011 the OpenIoT consortium join efforts to unify technology and services designing an OpenIoT application and services to create an ecosystem for the Internet of Things (IoT) using semantic technologies, cloud computing and autonomic principles as main enablers, privacy, security and mobility are also main aspects considered as crucial to enable within the IoT ecosystem.

Since September 2012 the fully OPEN SOURCE OpenIoT framework design was announced and the OpenIoT middleware was released in may 2013. From september 2013 OpenIoT platform was made fully available to the Open Source community for creating real time IoT services on demand and enable interoperability between vertical IoT solutions and interconnect data silos.

The OpenIoT framework (BETA version v0.1.1) has been released via the github project management portal <https://github.com/OpenlotOrg/openiot>. Likewise the first version of the Virtual Development Kit – OpenIoT-VDK (running Linux) with the complete OpenIoT platform pre-installed and preconfigured for use/development has been released. It can be downloaded from the OpenIoT github wiki. <https://github.com/OpenlotOrg/openiot/wiki/Downloads>.

The Virtual Development Kit (OpenIoT-VDK) developed and implemented, features the OpenIoT latest release i.e. v0.1.1 and it's size is 5,7 GB. The

OpenIoT-VDK facilitates the learning and use of the OpenIoT framework for an easy adoption and it is industry friendly under LGPL licence and totally open for academic purposes. The OpenIoT-VDK instance deploys the IoT service delivery model facilitating the validation of use cases by using the OpenIoT platform.

## SUCCESS STORIES

OpenIoT has been the receiver of the Open Source Blackduck Rookie of the year in the area of the Internet of Things. OpenIoT is maintained by the EU project consortium led by Insight-NUI Galway, See the press communicate as follow for more details:

“BURLINGTON, Massachusetts USA and Galway, Ireland, 2014 — Black Duck Software announced that OpenIoT was named a Black Duck Open Source Rookie of the Year in the area of the Internet of Things. The sixth annual Black Duck Open Source Rookies of the Year awards recognize the top new open source projects. This year’s honorees span cloud and software virtualization, privacy, social media, and Internet of Things (IoT) projects addressing needs in the enterprise, government, gaming and consumer applications, among others, and reflect important trends in the open source community.”

Press Release:

<http://www.blackducksoftware.com/news/releases/black-duck-announces-open-source-rookies-year-winners>

## EVENT DATES

OpenIoT Summer School  
4-8 August 2014, Galway City, Ireland

## OVERALL PROGRAM

The detailed agenda will be circulated in the following weeks  
The overall program / agenda is as follow:

Day 0 (Monday 4th August)  
Traveling Day

Day 1 (Tuesday 5th August)  
The OpenIoT architecture (High Level and Scenarios) - Half Day  
OpenIoT Components and its functionality (Running Demos) - Half Day

Day 2 (Wednesday 6th August) - Full Day  
Hands on Session, OpenIoT-VDK components and integration (Support as IoT Hackaton-like)  
Social event in a TBD location – usually an Irish Restaurant/PUB.

Day 3 (Thursday 7th August) - Full Day  
Interoperability and Integration of OpenIoT with Other platforms  
(Support as IoT Hackaton-like)

Day 4 (Friday 8th August) - Half Day  
Integrated Demo  
(Support as IoT Hackaton-like)  
Annual Summer BBQ (based on weather conditions)  
otherwise social event in a TBD location.

## VENUE

The Summer School will be hosted at:

INSIGHT Centre for Data Analytics Galway  
DERI Building - Main Meeting Room  
National University of Ireland Galway  
Lower Dangan  
IDA Business Park  
Galway City  
Co. Galway  
Ireland

Attached there is a Map explaining where to find us.

## ACCOMMODATION

Attached there is a list of hotels with University rates

## TRAVEL

Dublin Airport

<http://www.dublinairport.com/home.aspx>

There are two Express BUS couch services from Dublin to Galway  
Dublin Airport - Galway City - [www.citylink.ie](http://www.citylink.ie) <<http://www.citylink.ie/>> Express service

<http://citylink.ie/images/citylink-dublin-express-timetable-for-web.pdf>

Dublin Airport - Galway City - [www.gobus.ie](http://www.gobus.ie) <<http://www.gobus.ie/>> Express service

[http://www.gobus.ie/uplds/gobus\\_summer\\_timetable\\_2014\\_\(inside\).pdf](http://www.gobus.ie/uplds/gobus_summer_timetable_2014_(inside).pdf)

<[http://www.gobus.ie/uplds/gobus\\_summer\\_timetable\\_2014\\_%28inside%29.pdf](http://www.gobus.ie/uplds/gobus_summer_timetable_2014_%28inside%29.pdf)>

Shannon Airport

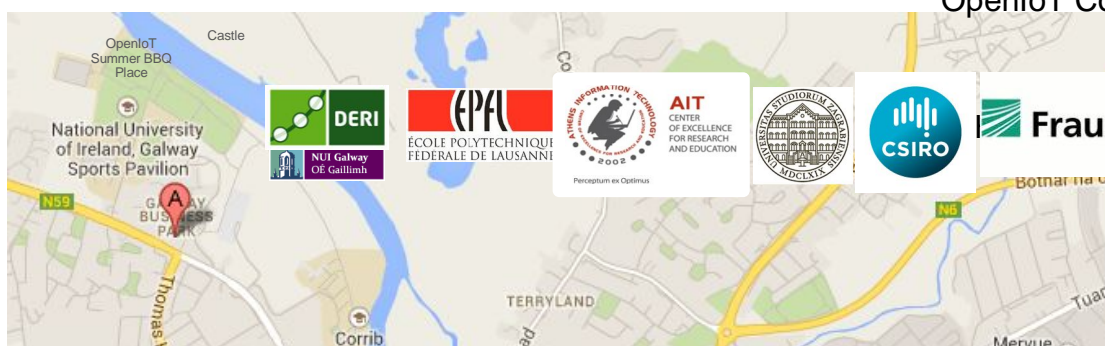
<http://www.shannonairport.ie/gns/Passengers/Home.aspx>

There are scheduled bus service from Shannon Airport to Galway City

Dublin Airport - Galway City - [www.buseireann.ie](http://www.buseireann.ie) <<http://www.buseireann.ie/>> services

<http://www.buseireann.ie/pdf/1360753025-051.pdf>

OpenIoT Consortium 2014



National University  
Of Ireland, Galway  
Main Campus



Eyre Square  
GALWAY  
City Centre

Bus Couch  
Station

Train  
Station



Last Update: June 2014

### Hotel Accommodation - Galway

Star Rating	Hotel	Address	Reservations No	Single	Double	Additional Information	Other Benefits	Credit Facilities - do you accept purchase order	Email	Website
<b>City Centre</b>										
***	Imperial Hotel	Eyre Square, Galway	091 563033	€69 B&B(Cont)	€89 B&B(Cont)			Yes	imperialhotelgalway@gmail.com	www.imperialhotelgalway.ie
***	Forster Court Hotel	Forster Street, Eyre Square, Galway	091 564111	€65 B&B	€75 B&B	3 <sup>rd</sup> boutique style property in the heart of Galway	Close to bus and train station, discounted parking, complimentary wi-fi		shelley@forstercourthotel.com	www.forstercourthotel.com
***	Jurys Inn Galway	Quay Street, Galway	091 566444	€65 B&B (twin)	€75 B&B (twin)		Complimentary wifi and newspaper	Yes	jurysinnsgalway@jurysinns.com	www.jurysinns.com
***	Harbour Hotel	New Dock Road, Galway	091 894800	€89 B&B	€99 B&B		Discounted parking rates	Yes	sales@harbour.ie	www.harbour.ie
****	Pillo Hotel & Spa Galway	Headford Point, Headford Road, Galway	091 513200 / 091 513222	€79 B&B Excl 28 Jul - 3 Aug	€89 B&B Excl 28 Jul - 3 Aug		Fitness Suite, Free underground parking, Wi-fi	Yes	reservations@pillohotelgalway.com	www.pillohotelgalway.com
****	Hotel Meyrick	Eyre Square, Galway	091 564041	€85 B&B Jan-Apr, Oct-Dec. €95 B&B May-Sept	€110 B&B Jan-Apr, Oct-Dec. €120 B&B May-Sept			Yes	reshm@hotelmeyrick.ie	www.hotelmeyrick.ie
****	Radisson BLU Hotel & Spa Galway	Lough Atalia Road, Galway	091 538300	€100 B&B Excl 30 Jul - 1 Aug	€110 B&B Excl 30 Jul - 1 Aug		Complimentary access to gym, pool, sauna, steam room & outdoor hot tub		reservations.galway@radissonblu.com	www.radissonhotelgalway.com

### Close to NUI Galway

<b>Hotel Accommodation - Galway</b>						Free Wifi, free parking, within walking distance.				Last Update: June 2014
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Star Rating	Hotel	Address	Reservations No	Single	Double	Additional Information	Other Benefits	Credit Facilities - do you accept purchase order	Email	Website
<b>Salthill/Knocknacarra</b>										
***	Hotel Clybaun	Clybaun Road, Knocknacarra, Galway	091 588088	€69 B&B excl 28th Jul - 5 Aug	€89 B&B excl 28th Jul - 5 Aug		Reduced Taxi Fare	Yes	reservations@hotelclybaun.com	www.hotelclybaun.com

Note: Maximum discount of 10% was set for 2014. Single occupancy rates are shown below this threshold. Excludes non-refundable rates.

## Hotel Accommodation - Galway

Last Update: June 2014

Star Rating	Hotel	Address	Reservations No	Single	Double	Additional Information	Other Benefits	Credit Facilities - do you accept purchase order	Email	Website
<b>County Galway</b>										
***	<b>Maldron Hotel Galway</b>	Oranmore, Co. Galway	091 792244	<b>€75 B&amp;B</b>	<b>€85 B&amp;B or best available</b>	<b>NUI Rate</b>	Taxi discount with Oran Cabs	Yes	<a href="mailto:res.galway@maldronhotels.com">res.galway@maldronhotels.com</a>	<a href="http://www.maldronhotelsgalway.com">www.maldronhotelsgalway.com</a>
***	<b>Raheen Woods Hotel</b>	Athenry, Co Galway	091 875 888	<b>€69 B&amp;B</b>	<b>€79 B&amp;B</b>	<b>RWHNUI G2014</b>	Full use of Tranquility Leisure Centre, Pick up from rail station available		<a href="mailto:info@raheenwoodshotel.ie">info@raheenwoodshotel.ie</a>	<a href="http://www.raheenwoodshotel.ie">www.raheenwoodshotel.ie</a>
****	<b>The Twelve Hotel</b>	Barna, Galway	091 597010	<b>€80 B&amp;B</b>	<b>€90 B&amp;B</b>	Quote Nui Galway Rate			<a href="mailto:enquire@thetwelvehotel.ie">enquire@thetwelvehotel.ie</a>	<a href="http://www.thetwelvehotel.ie">www.thetwelvehotel.ie</a>

**Note: A maximum threshold of €100 was set for B and B Single Occupancy. Any hotels not willing to reduce their rates below this threshold are excluded from the listing.**