Centre for IoT and Pervasive Systems

Dr Geoff Merrett, Head of Centre

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C-IOT RESEARCH AREAS

Sensor Technologies
Research into new and novel sensor devices to enable new innovative applications.

Data Management and Analysis
Accessing and making sense of the wealth of data obtained from the IoT.

Power and Energy
Increasing the lifetime or autonomy of IoT devices through improved management and efficiency and/or self-powered approaches.

Nanotechnology and Transistor Devices
Enabling faster, cheaper and/or lower-power computation.

Security, Safety and Privacy
Enabling a secure and trusted IoT, from hardware through to software.

Communications and Networking
5G communication and efficient networking to support future systems.

Information Processing and Machine Intelligence
Processing data and inferring information.

* Link to ECS Centre for Machine Intelligence
C-IOT APPLICATION DOMAINS

Health and Well-being
Improving quality of life through effective technologies for health care and well-being.

Earth Science
Improving our understanding of the environment around us through remote monitoring.

Smart Energy Systems
IoT systems to enable more effective and efficient generation, delivery, consumption and sharing of energy.

Smart Cities
Increasing connectivity and intelligence in towns and cities to improve services, sustainability, and quality of life.

Agricultural Management
Improving agricultural processes through improved awareness, intelligence and connectivity.

Smart Homes
Intelligent systems, connecting devices to simplify and automate everyday life.

* Link to ECS Centre for Health Technologies
C-IOT STRATEGY

Objectives

1. **Build the ECS IoT Community**
   - Improve the visibility of IoT activities within ECS, providing a focal point for the area;
   - Bring researchers (PhDs, postdocs, academics) together to create critical mass.

2. **Improve External Presence and Reputation**
   - Increase external exposure and recognition of our IoT activities and successes.

3. **Foster New Collaborations**
   - Help to build new interdisciplinary IoT research collaborations within ECS and beyond;
   - Utilise collaborations to leverage externally-funded IoT research.

4. **Consider New Educational Programmes**
   - Investigate potential for specialist IoT educational programmes, e.g. at Level 7 (MSc).

5. **Support Student Recruitment**
   - Enthuse A-Level students through IoT outreach activities targeted at UG recruitment;
   - Inspire UG/MSc students targeting PhD recruitment.
OUR EVENTS

Seminars, Reading Groups, Hackathons, Poster Events, PhD Recruitment, etc

Afternoon on IoT Security, July 2018
• 11x 10-min presentations
  – 6 from companies/organisations
  – 5 from academics (4 ECS)
• >70 attendees

Afternoon on Smart Cities, March 19
• 9x 10-/20-min presentations
  – 4 from companies/organisations
  – 5 from academics (3 ECS)
• ~70 attendees
MSc Internet of Things (1 year full-time)

Southampton offers an outstanding environment for masters-level study in the rapidly evolving field of Internet of Things (IoT). From microsensors to machine learning, this one-year MSc Internet of Things degree provides a thorough training in the key hardware and software components that underpin connected devices and systems, and the tools and methods used to protect and optimise them.

Introducing your degree

Combining elements of electronics and computer science, the MSc Internet of Things is designed for graduates from either discipline. It covers the theoretical knowledge and practical skills you’ll need to develop and engineer the next generation of IoT devices and systems. You’ll also have the flexibility to explore specialist IoT topics that interest you through a choice of optional modules.

The breadth of our IoT research activity and our integrated electronics and computer science department mean we can offer the range of expertise and facilities that are essential for a

Course Facts

Course Leader: Dr Basel Hadiak

Degree Awarded: MSc

Intake: Intake – 350 places across all ECS MSc programmes.

View entry requirements

Apply for this course

Order prospectus
FIND OUT MORE

• Keep an eye on our website www.c-iot.ecs.soton.ac.uk

• Register an interest to find out about:
  – Future events
  – Opportunities for collaboration (targeted)

www.c-iot.ecs.soton.ac.uk/find-out-more
YOUR QUESTIONS

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