Ada Lovelace Commemorative Lecture: IT Enabled Business Transformation

In today’s business environment successful organisations are continually changing the way they run their business operations not just to improve efficiency but to better serve their customers and become more competitive. Innovation in IT is recognised as the key enabler of business transformation. The development of new applications and systems that will successfully transform an organisation is a complex activity requiring rigorous analysis and planning along with careful stakeholder management to make certain that the IT is fully aligned with what the business needs.

Jessica Day will describe her wide range of experience working in IT and Management which have led her to her current role in business change at St. James’s Place, the UK’s largest FTSE-100 wealth management company. She will use case studies to describe her approach to the delivery of IT and business change programmes.

Finding trees, water leaks and soybeans from space with Data Science

The US and Canada are covered in massive forests. These are too big to observe regularly from the ground, but we can observe them from space. Using high-resolution satellite imagery and some ground data for training, it is possible to identify the number, species and volume of trees across large areas of forest with good accuracy. Rezatec combines data science with satellite imagery and geospatial data to deliver cloud-based analytics to global customers owning and operating land-based assets. This not only includes identification of tree species but crop identification, prediction of water leaks and forecasting global commodity harvests.

Quiz Evening

The BCS Herts committee is throwing a quiz evening at the University of Hertfordshire’s Style Bar. Join our free quiz evening, featuring a mix of general knowledge and computing based questions. Network, socialise or just relax while testing your knowledge against our quiz questions. The event will conclude with a prize for the lucky winners. Christmas jumpers are optional, but brains are required!

5G & The Future Mobile Network

5G has been in the news a lot recently, but what is it all about? Do we need another “G” (Generation) of mobile technology? Is it safe? Is it true that 5G will enable Augmented Reality, Remote Surgery, Factory Automation and Self-Driving Cars? What is the engineering and commercial reality behind current UK deployments of 5G and what can we expect in the future?

A release management tool for Salesforce - Gearset

Gearset is a start-up based in the Cambridge Science Park. This talk will show how some early pragmatic development choices allowed Gearset to grow rapidly, as well as how it continued to innovate and improve the product whilst still seamlessly releasing updates multiple times a day to all of its users. Using a real-life example Ben will explain how major changes can be made behind the scenes to support the expansion of Gearset whilst in most cases completely eliminating any downtime for their customers. After completing his PhD in Computer Science at Churchill College, Cambridge, Ben moved into commercial software development. He recently joined Gearset as a Software Engineer and is currently working on rearchitecting some of the underlying infrastructure that the product relies on.
**BCS Hertfordshire Event**

**helloworld@Herts Computing Fair & Fun Day**

Join BCS Herts in association with the University of Hertfordshire for the third annual helloworld@Herts Computing Fair.

Experience hands on a range of classic computing devices and other interesting, fun and educational stalls and exhibits suitable for all ages, experience levels and interests. Experiment with building and programming robots or try your hand at our mini hacking competition (a ‘Jeopardy’ style Capture the Flag). Have fun solving puzzles of a various difficultly levels whether you are experienced or a total novice.

A range of prizes are available across a number of challenges and for different experience levels/ages. Entry is free for all and refreshments will be provided.

You are encouraged to bring your own laptop, tablet or smartphone to help in some of the challenges (a limited number of loan devices will be available on a first come, first serve basis).

**Ethics and Risks of Social Media**

Social Media is arguably the most successful application (in its various forms) of the Internet in terms of uptake, despite significant reputational damage and negative news reports of unethical use and the risks associated with using it. Even those not using social media may have a presence, by implication, for example in photos or mentioned in posts. Ethics is concerned with what is ‘good’ - although what the ‘good’ is notoriously ambiguous - typical ethical principles refer to honesty and integrity (‘virtuous’ attributes), and behaviour towards others (respect, equality, don’t harm). All of these are evident in social media, both in their positive and negative forms. This presentation provides an overview of the ethics, and risks, from this popular form of communication - and the challenges to regulation and societal norms.

**Kit computer talk & build**

Attendees will be given (to keep) a kit computer which they can build during the talk. Following on from previously successful talks, we are repeating this event with a new kit, specifically designed for this talk. We aim to make the event appealing for those that have never attended one of these events, as well as ensuring our regular attendees find the event fresh and compelling. The new kit aims to explore audio using as a very capable micro-controller. The kit contains electronic components such as sensors, switches, LEDs, a prototyping breadboard. The included micro-controller is used by professionals and amateurs for a vast range of projects such as robotics, music and art projects.

**Visit to Bletchley Park**

Join us for an afternoon visit to Bletchley Park, the historic site of secret British code breaking activities during WWII. The site has changed quite dramatically over the last few years and includes a new visitor centre, a museum in Block B, the National Radio Centre as well as the mansion and codebreaking huts. See www.bletchleypark.org.uk for more information. Although this is member-only event, each member may bring a guest. Members £5, Guests £5.

**AGM followed by: Visit to Studio434 Classic Car Museum**

Created and owned by successful businessman Rodger Dudding. Studio434 is now one of the most extensive, privately owned classic vehicle collections in the UK. Join BCS Hertfordshire for our AGM, followed by a guided tour of the Studio434 collection and have your chance to see (and sit in) some of the world’s most legendary cars. Booking is required to attend this event. Museum entrance is £5 for both members and non-members (non-members may not participate in the AGM).
The committee of the BCS Hertfordshire branch is made up from a diverse range of volunteers with experience in the IT and Communications sectors. The committee represents the interests of BCS members located in Hertfordshire as well as parts of Buckinghamshire, Bedfordshire and North West London.

If you have any feedback, comments or would like to get involved with BCS Hertfordshire, please contact us using the information below or make yourself known to any of the BCS committee members at one of our events.

**Chairman**
Peter Klein  
MBCS CITP  
herts_chair@bcs.org.uk

**Secretary & Membership Sec.**
David Hubbard  
MBCS CITP  
herts_sec@bcs.org.uk
herts_memsec@bcs.org.uk

**Treasurer**
Paul Moggridge  
MBCS  
herts_treas@bcs.org.uk

**Webmaster**
Jeremy Withrington  
MBCS  
herts_web@bcs.org.uk

**Get Involved:** The BCS Hertfordshire Committee is a team of volunteers who bring skills, ideas & a passion for IT together to deliver our free events programme. If you would like to join us to shape our future, or you/your organisation are interested in participating in our IT outreach projects. Please get in touch:

**With thanks to:**  
Sopra Steria
University of Hertfordshire

---

**Continuing Professional Development**
As part of our Royal Charter as the governing body for IT Professional Practice. All BCS lecture and panel events qualify as points towards CPD. CPD Participation sign-off is available on request.

**Feedback**
If you have any feedback, questions, suggestions, ideas or comments; or you would like to get involved with BCS Herts, please contact any committee member or visit herts.bcs.org.

---

**How to Book**
To register your place at any of our events please visit herts.bcs.org/events. All events are free to both members and non-members unless otherwise stated.

If you require any further information, would like to discuss facilities or special requirements or require transport assistance while visiting a BCS Hertfordshire event please contact herts_sec@bcs.org.uk with your query.

---

**Venues | How to get there:** www.herts.bcs.org/findus/

**Sopra Steria**
Address: Sopra Steria, Three Cherry Trees Lane, Hemel Hempstead, HP2 7AH
By Road: Near M1 Junction 8, M25 Junction 21 | By Rail: Hemel Hempstead via Euston

**University of Hertfordshire**
Address: Lindop Building, University of Hertfordshire, College Lane, Hatfield, AL10 9AB
By Road: Near A1(M) Junction 4 | By Rail: Hatfield via Kings Cross

---

**Note:** Any product, venue, activity or opinion expressed at a BCS Hertfordshire event does not imply any support, endorsement, or promotion of such products or views by the BCS.