



ACM-BCS Visions of Computer Science 2010

International Academic Research Conference

13-16 April 2010

The University of Edinburgh

CONFERENCE PROGRAMME

*Incorporating:
CPHC
Visions of Computer Science
Grand Challenges*



**Tuesday 13 April
Appleton Tower**

CPHC Conference Day 1		
Time	Session	Room
12:00-12:30	Registration & Lunch	Main Concourse
13:00-14:15	Welcome and Chair's update <i>Liz Bacon</i> Information Group update and vision <i>Lachlan MacKinnon</i> BCS Academy of Computing (including the Open Impact Project) <i>Bill Mitchell</i> Update on e-Crime and Security Agenda and Opportunities <i>Philip Virgo</i>	Lecture Theatre 4
14:15-14:45	Annual General Meeting	
14:45-15:15	CITP update <i>Adam Thilthorpe</i>	
15:15-15:45	Coffee Break	Concourse
15:45-16:15	e-skills UK – An update on relevant e-skills UK programmes <i>Mark Ratcliffe</i>	
16:15-17:30	REF Issues – Panel Session <i>Morris Sloman</i> <i>Alan Bundy</i> <i>Hannah Chaplin</i>	Lecture Theatre 4
17:30-18:00	EPSRC Information and Discussion Session <i>Liam Blackwell</i>	
18:00-19:00	Break	Main Concourse
19:00	CPHC Conference Dinner ACM Update <i>Wendy Hall</i>	Teviot Rooms

**Wednesday 14 April
Informatics Forum**

CPHC Conference Day 2		
Time	Session	Room
09:00-09:30	Refreshments	IF Concourse
09:30-11:00	LDG Report <i>Alastair Irons</i> Pedagogic Research in Computer Science <i>Liz Burd, Alastair Irons and Sally Fincher</i>	G.07 / G07A
11:00-11:30	Coffee Break	IF Concourse
11:30-13:00	The Impact to Universities of Invigorating Computing in Schools 1. Update on EPSRC project on collecting material of interest to teachers <i>Quintin Cutts</i> 2. Serious Fun in CS <i>Peter McOwan</i> 3. Computing at Schools <i>Simon Humphreys</i>	G.07 / G07A
13:00-14:00	Lunch	IF Concourse

**Wednesday 14 April
Informatics Forum**

ACM-BCS Visions of Computer Science 2010 – Day 1		
Time	Session	Room
13:00-13:50	Registration & Lunch	IF Concourse
13:50-14:00	WELCOME Elizabeth Sparrow, BCS President Wendy Hall, ACM President	G.07 / G.07A
14:00-14:45	KEYNOTE SPEAKER Ross Anderson - University of Cambridge The dependability of complex socio-technical systems	
14:45-15:00	Comfort Break	IF Concourse
15:00-16:00	SESSION: Ubiquitous Systems <ul style="list-style-type: none"> • A Population Approach to Ubicomp System Design <i>Matthew Chalmers</i> • Spaces of Interaction <i>David Benyon, Kristina Hook and Laurence Nigay</i> 	G.07
15:00-16:00	SESSION: Theoretical Computing <ul style="list-style-type: none"> • Finding Unity in Computational Logic <i>Dale Miller</i> • Non-classical computing: feasible versus infeasible <i>Paul Cockshott, Greg Michaelson and Lewis Mackenzie</i> 	G.07A
16:00-16:15	Coffee Break	IF Concourse
16:15-17:00	KEYNOTE SPEAKER Nicolò Cesa-Bianchi - The University of Milan The game-theoretic approach to machine learning and adaptation	G.07 / G.07A
17:00-17:30	UKCRC AGA	4.31 / 4.33
17:30-19:00	Exhibits (including drinks reception)	Inspace, IF
19:00	Close	

**Thursday 15 April
Informatics Forum**

ACM-BCS Visions of Computer Science 2010 – Day 2		
Time	Session	Room
08:30-09:00	Refreshments	IF Concourse
09:00-09:45	<p>KEYNOTE SPEAKER Jon Kleinberg - Cornell University Exploring the Structure of On-Line Social Networks: The Roles of Positive and Negative Links in Network Interaction</p>	G.07 / G.07A
09:45-10:45	<p>SESSION: Digital Economy</p> <ul style="list-style-type: none"> • Extending Handivote to Handle Digital Economic Decisions <i>Karen Renaud and Paul Cockshott</i> • Multiscale not Multicore: Efficient Heterogeneous Cloud Computing <i>Anil Madhavapeddy, Richard Mortier, Jon Crowcroft and Steven Hand</i> 	G.07 / G.07A
09:45-10:45	<p>SESSION: In the wild</p> <ul style="list-style-type: none"> • How Current Challenges will drive the Second Decade of Wireless Sensor Networking <i>Michael Breza, Pedro Martins, Julie A. McCann, Evangelos Spyrou, Poonam Yadav and Shusen Yang</i> • A Vision for Technology-Mediated Support for Public Participation & Assistance in Mass Emergencies & Disasters <i>Leysia Palen, Kenneth Anderson, Gloria Mark, James Martin, Douglas Sicker, Martha Palmer and Dirk Grunwald</i> 	4.31 / 4.33
10:45-11:00	Coffee Break	IF Concourse
11:00-12:00	<p>PANEL DISCUSSION The Future of Computing Education</p>	G.07 / G.07A
12:00-13:00	<p>KEYNOTE SPEAKER Barbara Liskov - Massachusetts Institute of Technology The Power of Abstraction</p>	
13:00-14:00	Lunch	IF Concourse

**Thursday 15 April – CON'T
Informatics Forum**

Grand Challenges – Day 1		
Time	Session	Room
13.00-14.00	Registration for Grand Challenges (including lunch)	IF Concourse
14:00-14:05	WELCOME Wendy Hall, UKCRC Grand Challenges Steering Group Chair	G.07 / G.07A
14:05-15:25	Presentations <ul style="list-style-type: none"> • Synthetic sensory-motor systems for new ecological niches • Hatching a Phoenix: reclaiming success from software failure • Innovation Everywhere: Computing for 9 Billion People • Software Engineering Challenges: Achieving Zero Carbon Buildings by 2019 	
15:25-15:40	Coffee Break	IF Concourse
15:40-17:00	Panel Session <ul style="list-style-type: none"> • Delivering the healthcare we deserve • Modelling Personalized Value-based Healthcare • Grand Challenge in Assisted Living - Home Care Technologies • Allowing blind people to see and deaf people to hear: sensory substitution and multimodal interaction • Grass roots distributed healthcare 	G.07/G.07A
17:00	Close	
19:30-23:00	Visions 2010 & Grand Challenges Conference Dinner Speaker: Professor David Sugden, School of GeoSciences, University of Edinburgh	The Caves, Edinburgh

**Friday 16 April
Informatics Forum**

Grand Challenges – Day 2		
Time	Session	Room
08:30-09:00	Registration & Refreshments	IF Concourse
09:00-10:30	Updates from Existing Grand Challenges	G.07 / G.07A
10:30-11:00	Coffee Break	IF Concourse
11:00-13:00	Break out Sessions: Tele Healthcare (Chair: Alan Bundy) Climate/Environment(Chair: Joe Sventek) Social Computing (Chair: Wendy Hall) Ad-hoc discussion groups	G.07 G.07A 4.31 4.33
13:00-14:00	Lunch	IF Concourse
14:00-16:00	Plenary Rapporteurs, respondents and closing discussion	G.07 / G.07A
16:00	Close – Tea, Coffee available	IF Concourse