

**Monday 3 July 2017**

8.30-9 Opening	Welcome & opening session (Room B)		
9-10.30 Keynote	Sana Odeh: <i>Broadening participation in the Arab world</i> (Room B)		
10.30-11 Break & posters	<p>Heidi J.C. Ellis and Gregory W. Hislop: <i>A Course Based on Open Organization Principles</i>  Hylke H. Faber, Jan Salvador van der Ven and Menno D. M. Wierdsma: <i>Teaching Computational Thinking to 8-Year-Olds through ScratchJr</i>  Susan Rodger, Steve Cooper, Kathy Isbister, Madeleine Schep, Roxann Stalvey and Lance Perez: <i>K-12 Teachers Experiences with Computing: A Case Study</i>  Jorge Leoncio Guerra and Felix Armando Fermin: <i>Alignment of Undergraduate Curriculum for Learning IoT in a Computer Science Faculty</i>  Aparna Mahadev and Elena Braynova: <i>Using Common Problem Sets to increase Student Engagement and Retention in CS2</i>  Janka Majherova and Jana Jackova: <i>New Trends in Teaching Programming in Secondary Education in Slovakia</i>  Stefan Pasterk and Andreas Bollin: <i>A Graph-based Approach to Analyze and Compare Computer Science Curricula for Primary and Lower Secondary Education</i>  Violetta Lonati, Dario Malchiodi, Mattia Monga and Anna Morpurgo: <i>Bebras as a Teaching Resource: Classifying the Tasks Corpus using Computational Thinking Skills</i>  Tauno Palts and Margus Pedaste: <i>Tasks for Assessing Aspects of Computational Thinking</i>  George Nicou, Panayiotis Andreou and Irene Polycarpou: <i>CodeAdventure: Learning Introductory Programming</i>  Bruce Scharlau: <i>Build your Future: Guiding Students to Enhance their Employability</i>  Mohsen Dorodchi and Nasrin Dehbozorgi: <i>Addressing the Paradox of Fun and Rigor in Learning Programming</i></p>		
11-12.30 Track 1	<p><b>Session 1A: Providing a good start</b>  <b>Room B; session chair Mohsen Dorodchi</b>  Aidan McGowan, Neil Anderson, John Bush, Philip Hanna and Des Greer: <i>Learning to Program - Choose your Lecture Seat Carefully!</i>  Roger McDermott, Mark Zarb, Mats Daniels and Ville Isomöttönen: <i>First Year Computing Students' Perceptions of Authenticity in Assessment</i>  Pasqueline Dantas Scaico, Ruy José Guerra Barretto de Queiroz and José Jorge Lima Dias Junior: <i>Analyzing How Interest in Learning Programming Changes During a CS0 Course: A Qualitative Study with Brazilian Undergraduates</i></p>	<p><b>Session 1B: Software engineering and design</b>  <b>Room C; session chair Stan Kurkovsky</b>  Kevin Buffardi: <i>Comparing Remote and Co-located Interaction in Free and Open Source Software Engineering Projects</i>  Kevin Buffardi, Colleen Robb and David Rahn: <i>Learning Agile with Tech Startup Software Engineering Projects</i>  Lynda Thomas, Carol Zander, Chris Loftus and Anna Eckerdal: <i>Student Software Designs at the Undergraduate Midpoint</i></p>	<p><b>Session 1C: Working group presentations 1</b>  <b>Room D; session chairs Judy Sheard, Ari Korhonen</b>  WG1: <i>Understanding International Benchmarks on Student Engagement – Awareness, Research Alignment and Response from a Computer Science Perspective</i>  WG2: <i>Game Development for Computer Science Education</i>  WG3: <i>Integrating International Students into Computer Science Programs: Challenges and Strategies for Success</i>  WG4: <i>Developing Assessments to Determine Mastery of Programming Fundamentals</i>  WG5: <i>“I know it when I see it” – Perceptions of Code Quality</i>  WG6: <i>Developing a Holistic Understanding of Systems and Algorithms through Research Papers</i></p>
12.30-2 Lunch			
2-3.30 Track 2	<p><b>Session 2A: CS1</b>  <b>Room B; session chair Becky Grasser</b>  Robert H. Sloan, Cynthia Taylor and Richard Warner: <i>Initial Experiences with a CS + Law Introduction to Computer Science (CS 1)</i>  Timothy Urness: <i>A Hybrid Open/Closed Lab for</i></p>	<p><b>Session 2B: Off the beaten path</b>  <b>Room C; session chair Simon</b>  Anna Vasilchenko, David Philip Green, Haneen Qarabash, Anne Preston, Tom Bartindale and Madeline Balaam: <i>Media Literacy as a By-product of Collaborative Video Production by</i></p>	<p><b>Session 2C: Tips, techniques, and courseware</b>  <b>Room D; session chair Judith Gal-Ezer</b>  Vangel V. Ajanovski: <i>Curriculum Mapping as a Tool for Improving Students' Satisfaction with the Choice of Courses</i>  Elizabeth Vidal, Marco Aedo and Eveling Castro:</p>

Track 2 continued	<p><i>CS 1</i></p> <p>Orna Muller, Ayelet Butman and Moshe Butman: <i>Opening a (Sliding) Window to Advanced Topics</i></p>	<p><i>CS Students</i></p> <p>Stan Kurkovsky and Chad Williams: <i>Raspberry Pi as a Platform for Internet of Things Projects: Experiences and Lessons</i></p> <p>Paul Dickson, Jeremy Block, Gina Echevarria and Kristina Keenan: <i>An Experience-based Comparison of Unity and Unreal for a Stand-alone 3D Game Development Course</i></p>	<p><i>When the Robot meets the Turtle: a Gentle Introduction to Algorithms and Functions</i></p> <p>Philip Bille and Inge Li Gørtz: <i>Immersive Algorithms: Better Visualization with Less Information</i></p> <p>Arnold Rosenbloom, Sadia Sharmin and Andrew Wang: <i>GIT: Pedagogy, Use and Administration in Undergraduate CS</i></p> <p>Thomas Way, Mary-Angela Papalaskari, Lillian Cassel, Paula Matuszek, Carol Weiss and Yamini Praveena Tella: <i>Machine Learning Modules for All Disciplines</i></p> <p>Arnold Rosenbloom and Larry Zhang: <i>A 12 Week Full Stack Web Course in 2017</i></p> <p>Daniel Krutz and Samuel Malachowsky: <i>PLASMA: Practical LABs in Security for Mobile Applications</i></p> <p>Michael Black: <i>TetrisOS and BreakoutOS: Assembly Language Projects for Computer Organization</i></p> <p>Heidi J.C. Ellis, Gregory W. Hislop and Darci Burdge: <i>Courseware: HFOSS Project Evaluation</i></p>
3.30-4 Break & posters	Same posters as in morning session		
4-5.30 Track 3	<p><b>Session 3A: Educational Tools: Programming Support</b></p> <p><b>Room B; session chair Susan Rodger</b></p> <p>Sagar Parihar, Ziyaan Dadachanji, Praveen Kumar Singh, Rajdeep Das, Amey Karkare and Arnab Bhattacharya: <i>Automatic Grading and Feedback using Program Repair for Introductory Programming Courses</i></p> <p>Rebecca Smith, Terry Tang, Joe Warren and Scott Rixner: <i>An Automated System for Interactively Learning Software Testing</i></p> <p>Ayaan Kazerouni, Stephen Edwards, Simin T. Hall and Clifford Shaffer: <i>DevEventTracker: Tracking Development Events to Assess Incremental Development and Procrastination</i></p>	<p><b>Session 3B: Code Maturity</b></p> <p><b>Room C; session chair tba</b></p> <p>Hieke Keuning, Bastiaan Heeren and Johan Jeuring: <i>Code Quality Issues in Student Programs</i></p> <p>Yvonne Sedelmaier and Dieter Landes: <i>Experiences in Teaching and Learning Requirements Engineering on a Sound Didactical Basis</i></p> <p>Erkki Kaila, Rolf Lindén, Erno Lökkila and Mikko-Jussi Laakso: <i>About Programming Maturity in Finnish High Schools: A Comparison Between High School and University Students' Programming Skills</i></p>	<p><b>Session 3C: Selecting / Training the Teaching Staff</b></p> <p><b>Room D; session chair Amber Settle</b></p> <p>Dan Leyzberg, Jérémie Lumbroso and Christopher Moretti: <i>Nailing the TA Interview: Using Rubrics for Hiring Teaching Assistants</i></p> <p>Francisco J. Estrada and Anya Tafliovich: <i>Bridging the Gap Between Desired and Actual Qualifications of Teaching Assistants: An Experience Report</i></p> <p>Jennifer Rosato, Chery Lucarelli, Cassandra Beckworth and Ralph Morelli: <i>A Comparison of Online and Hybrid Professional Development for CS Principles Teachers</i></p>

Tuesday 4 July 2017

<p>9-10.30 Track 4</p>	<p><b>Session 4A: Exams and Exam Preparation Room B; session chair Lillian (Boots) Cassel</b> Paul Denny, Ewan Tempero, Dawn Garbett and Andrew Petersen: <i>Examining a Student-generated Question Activity using Random Topic Assignment</i> Yingjun Cao and Leo Porter: <i>Impact of Performance Level and Group Composition on Student Learning during Collaborative Exams</i> Anthony Estey and Yvonne Coady: <i>Study Habits, Exam Performance, and Confidence: How do Workflow Practices and Self-Efficacy Ratings Align?</i></p>	<p><b>Session 4B: K-12 Computing Education Room C; session chair Tony Clear</b> Veronica Cateté and Tiffany Barnes: <i>Application of the Delphi Method in Computer Science Principles Rubric Creation</i> Ronald I. Greenberg: <i>Educational Magic Tricks Based on Error-detection Schemes</i> Hannah Dee, Xefi Cufi, Alfredo Milani, Marius Marian, Valentina Poggioni, Olivier Aubreton, Anna Roura Rabionet and Tomi Rowlands: <i>Playfully Coding: Embedding Computer Science Outreach in Schools</i></p>	<p><b>Session 4C: Educational Tools Room D; session chair Irene Polycarpou</b> Phitchaya Mangpo Phothilimthana and Sumukh Sridhara: <i>High-coverage Hint Generation for Massive Courses</i> Stephen Edwards and Krishnan Murali: <i>CodeWorkout: Short Programming Exercises with Built-in Data Collection</i> Man Wang, Jean Mayo, Ching-Kuang Shene, Steve Carr and Chaoli Wang: <i>UNIXvisual: A Visualization Tool for Teaching UNIX Permissions</i></p>
<p>10.30-11 Break &amp; posters</p>	<p>Nadimpalli Mahadev: <i>Building a Secure Hacking Lab in a Small University</i> James Walker, Jean Mayo, Ching-Kuang Shene and Steve Carr: <i>Visualization for Secure Coding in C</i> Bastian Küppers and Ulrik Schroeder: <i>E-assessment and Bring Your Own Device</i> Antti Knutas, Jouni Ikonen, Laura Anna Ripamonti, Dario Maggiorini and Jari Porras: <i>Discovering Indicators of Commitment in Computer-supported Collaborative Student Teams</i> Kai Qian, Hossain Shahriar, Fan Wu, Lixin Tao and Prabir Bhattacharya: <i>Labware for Secure Mobile Software Development (SMSD) Education</i> Joshua License: <i>TestSQL: Learn SQL the Interactive Way</i> Herman Koppelman: <i>Yellow and Red Cards to Deal with Hitchhiking in Groups</i> Malcolm Hutchison: <i>Self-assess Competency as Yes/No – A Preliminary Study</i> Francesca Arcelli Fontana and Claudia Raibulet: <i>Students' Feedback in Using GitHub in a Project Development for a Software Engineering Course</i> Alexandra Badets, Becky Grasser and Stefan Peltier: <i>Cross Cultural Project Based Learning &amp; Soft Skills Practice</i> Milton Luoma, Jigang Liu and Kai Qian: <i>Designing an Undergraduate Minor Program in E-discovery</i> Lillian Cassel, Don Goelman, Michael Posner, Darina Dicheva and Christo Dichev: <i>Data Science For All: A Tale of Two Cities</i></p>		
<p>11-12.30 Track 5</p>	<p><b>Session 5A: CS Learning Room B; session chair Stephen Edwards</b> Daniel La Vista, Nickolas Falkner and Claudia Szabo: <i>Understanding the Effects of Intervention on Computer Science Student Behaviour in On-line Forums</i> Shifa-E-Zehra Haidry, Katrina Falkner and Claudia Szabo: <i>Identifying Domain-specific Cognitive Strategies for Software Engineering</i> Isabelle Blasquez and Hervé Leblanc: <i>Specification by Example for Educational Purposes</i></p>	<p><b>Session 5B: K-12 Computing Education II Room C; session chair Michal Armoni</b> Anna Lamprou, Alexander Repenning and Nora Anna Escherle: <i>The Solothurn Project – Bringing Computer Science Education to Primary Schools in Switzerland</i> Isabella Corradini, Michael Lodi and Enrico Nardelli: <i>Computational Thinking in Italian Schools: Quantitative Data and Teachers' Sentiment Analysis after Two Years of Programma il Futuro Project</i> Samah Al Sabbagh, Huda Gedawy, Hanan Alshikhabobakr and Saquib Razak: <i>Computing Curriculum in Middle Schools – An Experience Report</i></p>	<p><b>Session 5C: Panel Room D; session chair Panayiotis Andreou</b> Francesco Maiorana, Miles Berry, Mark Nelson, Chery Lucarelli, M. Phillipps, S. Mishra and A. Benassi: <i>International Perspectives on CS Teacher Formation and Professional Development</i></p>

12.30-1.30 Track 6	<b>Session 6A: Academic Integrity Room B; session chair Henry Walker</b> Arto Hellas, Juho Leinonen and Petri Ihantola: <i>Plagiarism in Take-home Exams: Help-seeking,  Collaboration, and Systematic Cheating</i> Judy Sheard, Simon, Matthew Butler, Katrina Falkner, Michael Morgan and Amali Weerasinghe: <i>Strategies for Maintaining  Academic Integrity in First-year Computing  Courses</i>	<b>Session 6B: Working Group Presentations Room C; session chairs Ari Korhonen, Judy Sheard</b> WG7: <i>Understanding the Effects of Lecturer  Intervention on Computer Science Student  Behaviour</i> WG8: <i>The Internet of Things in CS Education:  Current Challenges and Future Potential</i> WG9: <i>Searching for Early Developmental  Activities Leading to Computational Thinking  Skills</i>	<b>Session 6C: Panel Room D; session chair Jacqui Whalley</b> Irene Polycarpou, Panayiotis Andreou, Cary Laxer, Stanislav Kurkovsky: <i>Academic-Industry  Collaborations</i>
1.30-2 Lunch	Collection of lunch packages		
2-?	Excursions		
8-11	Conference dinner <i>Cantina Bentivoglio</i> Via Mascarella, 4/B Bologna GPS 44.498143, 11.349134 <a href="http://www.cantinabentivoglio.it/ita/home.php">http://www.cantinabentivoglio.it/ita/home.php</a>		

Wednesday 5 July 2017

9-10.30 Keynote	Stefano Zacchioli: <i>Software Heritage: scholarly and educational synergies with preserving our software commons</i> (Room B)		
10.30-11 Break & posters	Same posters as on Tuesday morning		
11-12.30 Track 7	<p><b>Session 7A: Gender &amp; Diversity in Computing Room B; session chair Deepak Kumar</b>  Allison Scott, Alexis Martin, Frieda McAlear and Sonia Koshy: <i>Broadening Participation in Computing: Examining Experiences of Girls of Color</i>  Alison Hunter and Raewyn Boersen: <i>Out from the Shadows: Encouraging Girls in New Zealand into IT Careers</i>  Keith Quille, Natalie Culligan and Susan Bergin: <i>Insights on Gender Differences in CSI: A Multi-institutional, Multi-variate Study</i></p>	<p><b>Session 7B: Enhancing CS Instruction Room C; session chair Janet E Carter</b>  Martin Kropp, Marla Landolt and Sonja Hof: <i>Use of Gamification to Teach Agile Values and Collaboration</i>  Francisco J. Estrada: <i>Practical Robotics in Computer Science using the Lego NXT, an Experience Report</i>  Darragh O'Brien: <i>Teaching Operating Systems Concepts with SystemTap</i></p>	<p><b>Session 7C: Feedback Room D; session chair Paul Denny</b>  Michael James Scott and Gheorghita Ghinea: <i>On the Impact of Lecture Recording Reduction: Evidence from a Randomised Trial</i>  Claudia Szabo and Nickolas Falkner: <i>Silence, Words, or Grades: The Effects of Lecturer Feedback in Multi-revision Assignments</i>  Chris Martin, Janet Hughes and John Richards: <i>Learning Dimensions: Lessons from Field Studies</i></p>
12.30-2 Lunch			
2-3.30 Track 8	<p><b>Session 8A: Programming Room B; session chair Roger McDermott</b>  Cruz Izu, Cheryl Pope and Amali Weerasinghe: <i>On the Ability to Reason about Program Behaviour: A Think-aloud Study</i>  Daniel Toll and Anna Wingkvist: <i>How Tool Support and Peer Scoring Improved our Students' Attitudes toward Peer Reviews</i>  Kyle Dewey, Phillip Conrad, Michelle Craig and Elena Morozova: <i>Evaluating Test Suite Effectiveness and Assessing Student Code via Constraint Logic Programming</i></p>	<p><b>Session 8B: Non-Majors Room C; session chair Herman Koppelman</b>  Keith O'Hara, Kathleen Burke, Diana Ruggiero and Sven Anderson: <i>Linking Language &amp; Thinking with Code: Computing within a Writing-Intensive Introduction to the Liberal Arts</i>  Sebastian Dziallas, Sally Fincher, Colin Johnson and Ian Utting: <i>A First Look at the Year in Computing</i>  Jennifer Campbell, Michelle Craig and Marcus Law: <i>Computing for Medicine: An Experience Report</i></p>	<p><b>Session 8C: Gamification Room D; session chair Larry Merkle</b>  Rémy Siegfried, Severin Klinger, Markus Gross, Robert W. Sumner, Francesco Mondada and Stéphane Magnenat: <i>Improved Mobile Robot Programming Performance through Real-time Program Assessment</i>  Brian Harrington and Ayaan Chaudhry: <i>TrAcademic: Improving Participation and Engagement in CS1/CS2 with Gamified Practicals</i>  Lassi Haaranen: <i>Programming as a Performance – Live-streaming and its Implications for Computer Science Education</i></p>
3.30-4.30	Closing session (Room B)		