Constructionism 2018

Constructionism, computational thinking and educational innovation

Vilnius, Lithuania, August 21 to 25

Conference program

Monday, August 20	**Teachers‘ day (Pre-Conference)**
9^{00}–10^{00}	Registration & Coffee (in front of the Theatre Hall**)**
10^{00}–12^{00}	**Opening Session**: Main Building, The Theatre Hall (Universiteto St. 3) **Welcome** **Giedrius Vaidelis (Lithuania).** *Updating Educational Content: Challenges and Possibilities* **Evgenia Sendova (Bulgaria).** *The Beauty in Science and the Science in Beauty* **Rimantas Želvys (Lithuania).** *Future Education: New Challenges for Lithuania?*
12^{00}–13^{00}	Lunch Registration in the Faculty of Philosophy (Universiteto St. 9)
13^{00}–15^{00}	**Workshops (WS) in parallel:** The Faculty of Philosophy (Universiteto St. 9) **WS 1**: room 106. **Judith Bell** (New Zealand). *Dynamic Teaching Ideas for Teaching Music Theory*. Target audience: primary school teachers & music teachers **WS 3**: room 204. **Paul Goldenberg, Cynthia J. Carter** (USA). *Developing Algebraic Habits of Mind in Students*. Target audience: mathematics teachers for students ages 11–18 **WS 7**: room 111. **Petra Enges-Pyykönen** (Finland). *ViLLE – Electronic Learning Path for Mathematics and Programming*. Target audience: primary school teachers **WS 8**: room 201. **Evgenia Sendova, Nikolina Nikolova** (Bulgaria). *Constructionism in Action: Do we Need to Start from Scratch?* Target audience: all teachers **WS 9**: room 313. **Gary Stager** (USA). *Teaching Coding and Physical Computing.* Target audience: all teachers **WS 10**: room 112. **Jacqueline Staub** (Switzerland). *The Essence of Programming at School – Logo in a Spiral Curriculum*. Target audience: primary and lower secondary school teachers **WS 11**: room 308. **Carol Sperry Suziedelis** (USA). *How to Create and Sustain a Progressive Pedagogy in a Traditional Setting*. Target audience: all teachers **WS 13**: room 306. **Annalise Duca, Angele Giuliano** (Malta), **Sofia Nikitopoulou, Nikoleta Yiannoutsou, Chronis Kynigos** (Greece). *The ER4STEM Repository for Educational Robotics*. Target audience: all teachers
15^{00}–15^{30}	Coffee break
15^{30}–17^{00}	**Workshops (WS) in parallel:** The Faculty of Philosophy (Universiteto St. 9). **WS 2**: room 106. **Tim Bell** (New Zealand). *Computer Science Unplugged for Teachers*. Target audience: primary school teachers **WS 4**: room 204. **Paul Goldenberg, Cynthia J. Carter** (USA). *Puzzles & Programming to Develop Mathematical Habits of Mind in 6–10-year Olds*. Target audience: primary school teachers for students ages: 6–10 **WS 5**: room 201. **Ivan Kalaš** (Slovakia). *Powerful Ideas in Lower Primary Programming: High Time to Recognize Them*. Target audience: educators interested in lower primary computing (pupils aged 5 to 9) and general primary teachers **WS 6**: room 111. **Witek Kranas** (Poland). *SNAP! - Beauty & Joy of Computing (visually)*. Target audience: informatics teachers, lower and upper secondary schools (6-12 grades) **WS 8**: room 401. **Evgenia Sendova, Nikolina Nikolova** (Bulgaria). *Constructionism in Action: Do we Need to Start from Scratch?* Target audience: all teachers **WS 9**: room 313. **Gary Stager** (USA). *Teaching Coding and Physical Computing*. Target audience: all teachers **WS 10**: room 112. **Jacqueline Staub** (Switzerland). *The Essence of Programming at School – Logo in a Spiral Curriculum*. Target audience: primary and lower secondary school teachers **WS 11**: room 308. **Carol Sperry Suziedelis** (USA). *How to Create and Sustain a Progressive Pedagogy in a Traditional Setting*. Target audience: all teachers **WS 12**: room 205. **Igor Verner, Khayriah Massarwe, Daoud Bshouty** (Israel). *Joyful Learning of Geometry in Cultural Context. Analysis and Construction of Geometric Ornaments*. Target audience: all teachers **WS 13**: room 306. **Annalise Duca, Angele Giuliano** (Malta), **Sofia Nikitopoulou, Nikoleta Yiannoutsou, Chronis Kynigos** (Greece). *The ER4STEM Repository for Educational Robotics*. Target audience: all teachers
17^{00}–18^{00}	Reflections and Panel Discussion: room 301

Tuesday, August 21 / Location: Main Building, The Theatre Hall (Universiteto St. 3)

8^{30}–all day	Registration
10^{00}–11^{30}	Excursion to Old Vilnius University I
11^{30}–13^{00}	Excursion to Old Vilnius University II
14^{00}–16^{00}	Session chair: **Valentina Dagienė** **Opening** **Plenary session I** **Rimantas Želvys.** One Hundred Years of Educational Development in Lithuania **James Clayson.** *Look Closely, Watch What Happens: Visual Modelling and Constructionism*
16^{00}–16^{30}	Coffee break
16^{30}–17^{30}	Session chair: **Arūnas Poviliūnas** **Plenary session II** **Gary Stager.** *Making Constructionism Great Again*
17^{30}–18^{30}	**Panel Discussion I** *Inside the Trojan Horse – A Discussion Among the Next Generation of Constructionists* Sylvia Martinez (moderator), Gary Stager, Amy Dugré, Angela Sofia Lombardo, Susana Tesconi, Tracy Rudzitis, Brian C. Smith, Jaymes Dec
18^{30}–19^{30}	*Welcome Reception / Location: Grand Courtyard*

Wednesday, August 22 / Location: The Faculty of Philosophy (Universiteto St. 9)

8^{30}–10^{30}	Session chair: **Gerald Futschek** **Plenary session III:** room 301 **Carol Sperry Suziedelis.** The *Evolution of a Constructionist Teacher (with Reminders from Seymour Papert)* **Evgenia Sendova**. *Back 100 000(2)*	Session chair: **Chronis Kynigos** **Plenary session IV:** room 302 **Celia Hoyles, Richard Noss**. *Scratchmaths: A Positive Outcome for Constructionism at Scale* **Ivan Kalaš.** *Programming in Lower Primary Years: Design Principles and Powerful Ideas*
10^{30}–11^{00}	**Working Group (WG) presentations I:** room 301 WG 2: **Don Passey,** Loice Victorine Atieno, Wilfried Baumann, Valentina Dagienė. *Developing Constructionism, or a New Learning Concept, Across the Ages.*	**Panel discussion II** room 302 *Constructionism at Scale***.** Nathan Holbert (moderator), Matthew Berland, Yasmin Kafai, Richard Noss, Celia Hoyles, Kylie Peppler, Debbie Fields
11^{00}–11^{30}	Coffee break	

11^{30}–13^{30}	Session chair: **Natasa Grgurina** **Paper session 1:** room 301 **Education and innovations** **Arthur Hjorth, Corey Brady, Uri Wilensky.** *Sharing is Caring in the Commons – Students' Conceptions about Sharing and Sustainability in Social-Ecological Systems* **Arthur Hjorth, Uri Wilensky.** *Urban Planning-in-Pieces: A Computational Approach to Understanding Conceptual Change and Causal Reasoning about Urban Planning* **Sugat Dabholkar, Gabriella Anton, Uri Wilensky.** *Developing Mathetic Content Knowledge Using an Emergent Systems Microworld* **Elmara Pereira de Souza, Luísa Moura.** *Constructionism as an Epistemological Option in Courses of Youth Center for Science and Culture – Bahia – Brazil*	Session chair: **Evgenia Sendova** **Paper session 2:** room 302 **Constructionism in Mathematics** **Chantal Buteau, Ana Isabel Sacristán, Eric Muller.** *Teaching in a Sustained Post-Secondary Constructionist Implementation of Computational Thinking for Mathematics* **Maite Mascaró, Ana Isabel Sacristán**. *Assessing Learning through Exploratory Projects in Constructionist R-based Statistics Courses for Environmental Science Students* **Christina Todorova, Carina Girvan, Nikoleta Yiannoutsou, Marianthi Grizioti, Ivaylo Gueorguiev, Pavel Varbanov, George Sharkov.** *Visualizing Mathematics with the MathBot: A Constructionist Activity to Explore Mathematical Concepts through Robotics* **Einari Kurvinen, Valentina Dagiene, Mikko-Jussi Laakso.** *The Impact and Effectiveness of Technology Enhanced Mathematics Learning*	Session chair: **Eglė Jasutė** **Workshop 1:** room 111 **Jacqueline Staub.** *The Essence of Programming at School – Learning for Life* **Workshop 2:** room 111 **Stephen Howell, Lizbeth Goodman.** *Developing Body Tracking Software with Scratch and Kinect*
13^{30}–14^{30}	Lunch		

14^{30}–16^{00}	Session chair: **Gabrielė Stupurienė** **Working Group (WG) presentations II:** room 301 WG 1: **Gerald Futschek, Bernhard Standl,** Chantal Buteau, Andrew Csizmadia, Lilia Georgieva, Lina Vinikienė, Jane Waite. *Constructionist Approaches to Computational Thinking*.	Session chair: **Tatjana Jevsikova** ***Working Group (WG) presentations* III:** room 302 WG 3: **Evgenia Sendova,** Christos Chytas, Katarzyna Olędzka, Ralf Romeike, Wolfgang Slany**.** *Creating and Looking at Art with Logo Eyes*.

	WG 5: **Michael Weigend,** Kazunari Ito, Anita Juškevičienė, Igor Pesek, Zsuzsa Pluhár, Jiří Vaníček. *Constructionism in the Classroom: Creative Learning Activities on Computational Thinking*. WG 6*:* **Mattia Monga,** Michael Lodi, Dario Malchiodi, Anna Morpurgo, Oluwakemi Oduwole, Bamidele Oluchi, Bernadette Spieler. *Learning to Program in a Constructionist Way.*	WG 4: **Lilija Duoblienė, Jūratė Baranova,** Luc Anckaert, Wilfried Baumann **.***The Constructive Strategies in Teaching Humanities with Films*. WG 7: **Ana Isabel Sacristán,** Richard Akrofi Kwabena Baafi, Lina Kaminskienė, Michael Sabin. *Constructionism in Upper Secondary and Tertiary Levels*.
16^{00}–16^{30}	Coffee break	
16^{30}–18^{30}	Session chair: **Mattia Monga** **Paper session 3:** room 301 **Computational Thinking** **Judith Bell, Tim Bell.** *Computational Thinking and Music Learning* **Marianthi Grizioti, Chronis Kynigos.** *Programming Approaches to Computational Thinking: Integrating Turtle Geometry, Dynamic Manipulation and 3D Space* **Marianthi Grizioti, Chronis Kynigos.** *Constructionist Approaches to Computational Thinking: A Case of Game Modding with ChoiCo* **Anita Juškevičienė, Valentina Dagienė.** *Interconnection Between Computational Thinking and Digital Competence*	Session chair: **Jiří Vaníček** **Paper session 4:** room 302 **Constructionist approaches** **Valentina Dagienė, Gabrielė Stupurienė.** *Short Tasks – Big Ideas: Constructive Approach for Learning and Teaching of Informatics Concepts in Primary Education.* **Miroslava Černochová, Radek Čuma, Hasan Selcuk.** *Forming Concepts for Programming Conditional Statements in the Primary School* **Jean Griffin.** *Constructionism and De-Constructionism as Complementary Pedagogies* **Tilman Michaeli, Stefan Seegerer, Ralf Romeike.** *Enabling Collaboration and Tinkering: A Version Control System for Block-based Languages* **Jake Rowan Byrne, Kevin Sullivan, Katriona O'sullivan.** *Active Learning of Computer Science Using a Hackathon-like Pedagogical Model*	Session chair: **Arthur Hjorth** **Paper session 5:** room 306 **Reflections** **Nicolas Pope, Jonathan Foss, Meurig Beynon.** *Reconstructing Constructionism by Construal* **Deborah Fields, Mia Shaw, Yasmin Kafai.** *Personal Learning Journeys: Reflective Portfolios as "Objects-to-Learn-With" in an E-textiles High School Class* **Evgeny Patarakin.** *Using Agent-based Modelling of Collaboration for Social Reflection* **Francesca Agatolio, Alfredo Asiain, Alfredo Pina, Gabriel Rubio, Michele Moro.** *Constructive and Collaborative Digital Storytelling for Enhancing Creativity and Cooperation In and Out of School*
Thursday, August 23 / Location: The Faculty of Philosophy (Universiteto St. 9)		
8^{30}–10^{30}	Session chair: **Gary Stager** **Plenary session V:** room 301 **Gerald Futschek.** *Computational Thinking and Creativity* **Tim Bell.** *CS Unplugged and Computational thinking*	Session chair: **James Clayson** **Plenary session VI:** room 302 **Uri Wilensky.** *Reempowering powerful ideas* **Paulo Blikstein.** *Constructionism Won, Now What? The Role of Constructionist Research in the Age of Ubiquitous Computing*
10^{30}–11^{00}	Session chair: **Anita Juškevičienė** **Poster Session I:** room 301 **Nalin Tutiyaphuengprasert.** *Applied Constructionism: Critical Reflection and Learning Through Play in Adult Learning* **Sawaros Thanapornsangsuth, Nathan Holbert, Monica Chan.** *Towards Girls' Self-perception in Technology and Craft: Challenges and Implications* **Enric Ortega Torres, Vincent Sanjosé López, Joan-Josep Solaz Portolés.** *Influence of Students' Self-perceived Use of Metacognitive Strategies and Sensory Preferences on Academic Achievement in Science and Technology* **Takeshi Watanabe, Yuriko Nakayama, Yasunori Harada, Yasushi Kuno.** *Programming Lessons for Kindergarten Children in Japan* **Sayaka Tohyama, Yugo Takeuchi.** *Collaborative Creative Music Activity with ICT: A Case Study for Children in Grade Five* **Yoshiaki Matsuzawa, Misako Noguchi, Issei Nakano.** *Exploration of Algorithm Abstraction Process with Cubetto and Middle Grade Elementary Kids* **Aoi Yoshida, Kazunari Ito, Kazuhiro Abee.** *A Practical Report on a Programming Course with "Making" Using micro:bit* **Liudmyla Kryvoruchka**. *Heuristic Potential of Open Institutional Models in Researchers Education.*	Session chair: **Lina Vinikienė** **Poster Session II:** room 302 **Michael Tan.** *Constructing what? Knowledge of the powerful, and powerful knowledge* **Carina Girvan, Wilfried Lepuschitz, Ivaylo Gueorguiev, Christina Todorova, Chronis Kynigos, Marianthi Grizioti, Angele Giuliano, Annalise Duca, Julian Mauricio Angel-Fernandez, Markus Vincze.** *Educational Robotics for STEM: From Workshops to Curricula and Framework* **Ivaylo Gueorguiev, Christina Todorova, Nikoleta Yiannoutsou, Xristina Greka, Pavel Varbanov, George Sharkov, Carina Girvan, Julian Mauricio Angel-Fernandez, Lisa Vittori, Annalise Duca.** *Towards a Generic Curriculum for Educational Robotics in STEM: From Scientific Concepts to Technologies and Powerful Ideas* **Barbara Sabitzer.** *Modeling Across the Subjects* **Jinbao Zhang.** *An Experimental Exploration of the Development of Design Thinking in University Maker Courses* **Márton Visnovitz, Győző Horváth.** *The Web – A Platform for Creation* **Pekka Mäkiaho, Timo Poranen, Katriina Vartiainen.** *Construction of a Project Monitoring Application Iteratively and Incrementally* **Lina Vinikienė, Valentina Dagienė**. *Different Cultures – Different Approaches to Reasoning and Algorithms*
11^{00}–11^{30}	Coffee break	

11^{30}–13^{30}	Session chair: **Jacqueline Staub** **Paper session 6:** room 301 **Programming education** **Jiří Vaníček.** *Concept-building Oriented Programming Education* **Ungyeol Jung, Young Jun Lee.** *The Direction and Possibility for Social Justice in Informatics Education based on Bebras Challenge in Republic of Korea* **Ken Kahn, Niall Winters.** *AI Programming by Children* **Elisabeth Wetzinger, Gerald Futschek, Bernhard Standl.** *A Creative Learning Sequence in an Introductory Programming MOOC*	Session chair: **Wolfgang Slany** **Paper session 7:** room 302 **Robotics** **Julian Mauricio Angel Fernandez, Nikoleta Yiannoutsou, Chronis Kynigos, Carina Girvan, Markus Vincze.** *Towards a Framework for Educational Robotics* **Flavio Campos.** *Design Curriculum for Educational Robotics: Constructionist Pedagogical Experience in Formal Education* **Dave Catlin, Martin Kandlhofer, Stephanie Holmquist, Andrew Paul Csizmadia, Julian Mauricio Angel Fernandez, John-John Cabibihan.** *EduRobot Taxonomy and Papert's Paradigm* **Karolína Mayerová, Michaela Veselovská.** *How Students Struggled with Preparation of Activities for a Leisure Time Robotic Workshop*	Session chair: **Ana Isabel Sacristán** **Paper session 8:** room 306 **Jose Armando Valente, Paulo Blikstein.** *The Construction of Knowledge in Maker Education: A Constructivist Perspective* **Panel discussion III:** room 306 *Constructionism across Cultures: Commonalities and Differences of Constructionist Implementations Around the World* joined with papers **Jose Armando Valente, Paulo Blikstein.** *Constructionism in Different Cultures: the case of Brazil &* **Deborah Fields, Paulo Blikstein.** *What Is Constructionism? Views from a Thai Perspective* Jose Armando Valente (moderator), Paulo Blikstein, Deborah Fields, Michael Tan
13^{30}–14^{30}	Lunch		
14^{30}–22^{00}	Excursion & Dinner		
Friday, August 24 / Location: The Faculty of Philosophy (Universiteto St. 9)			
8^{30}–10^{30}	Session chair: **Ivan Kalaš** **Plenary session VII:** room 301 **Paul Goldenberg.** *Teaching Children to be Problem Posers and Puzzle-creators in Mathematics* **Ana Isabel Sacristán.** *Constructionist Experiences for Mathematics across Educational Levels*	Session chair: **Jose Armando Valente** **Plenary session VIII:** room 302 **Wolfgang Slany.** *Rock Bottom, the World, the Sky: Catrobat, an Extremely Large-scaling and Long-term Visual Coding Project Relying Purely on Smartphones* **Gary Stager**, co-speaker **Sylvia Martinez.** *Turning Theory Into Practice – Spreading Constructionism*	
10^{30}–11^{00}	**Paper session 9:** room 301 **Tiina Partanen, Pia Niemelä, Timo Poranen.** *Racket Programming Material for Finnish Elementary Math Education*	**Demo session 1:** room 302 **Markus Klein, Clemens Koza, Wilfried Lepuschitz, Gottfried Koppensteiner.** *Hedgehog: A Versatile Controller for Educational Robotics*	
11^{00}–11^{30}	Coffee break		
11^{30}–13^{30}	Session chair: **Miroslava Černochová** **Paper session 10:** room 301 **Designing activities** **Yasmin Kafai, Deborah Fields.** *Some Reflections on Designing Constructionist Activities for Classrooms* **Kit Martin, Michael Horn, Uri Wilensky.** *Ant Adaptation: A Complex Interactive Multitouch Game About Ants Designed for Museums* **Michael Weigend, Fenja Göcking, Alexander Knuth, Patrick Pais Pereira, Laura Schmidt.** *Media Parkour – Experiential Learning Activities for Media Education* **Brendan Tangney, Ian Boran, Tony Knox, Aibhín Bray.** *Constructionist STEM Activities Using the Bridge21 Model*	Session chair: **Márton Visnovitz** **Paper session 11:** room 302 **Teacher education** **Daniel Hickmott, Elena Prieto-Rodriguez.** *To Assess or Not to Assess: Tensions Negotiated in Six Years of Teaching Teachers about Computational Thinking* **Daniel Hickmott, Elena Prieto-Rodriguez.** *Constructionist Experiences in Teacher Professional Development: A Tale of Five Years* **Igor Verner, Khayriah Massarwe, Daoud Bshouty.** *Ethnomathematics in Teacher Education: Analysis and Construction of Geometric Ornaments* **Xiaoxue Du, Kay Chioma Igwe.** *Computational Thinking in Teacher Professional Development Programs*	Session chair: **Don Passey** **Paper session 12:** room 306 **Methodologies** **Sven Jatzlau, Ralf Romeike.** *How High is the Ceiling? Applying Core Concepts of Block-based Languages to Extend Programming Environments* **Anton Chukhnov, Sergei Pozdniakov, Ilya Posov, Athit Maytarattanakhon.** *Analysis of Constructive and Cognitive Activities of Participants in Online Competitions in Computer Science* **Vladimiras Dolgopolovas, Valentina Dagienė, Eglė Jasutė, Tatjana Jevsikova.** *Design Science Research for Computational Thinking in Constructionist Education: A Pragmatistic Perspective* **Aleksandra Klašnja-Milićević, Mirjana Ivanović.** *Learning Analytics in Education: Objectives, Application Possibilities and Challenges*
13^{30}–14^{30}	Lunch		

14^{30}–16^{00}	Session chair: **Mihaela Sabin** **Paper session 13:** room 301 **Curriculum matters** **Eva Klimeková.** *Curriculum Intervention for Learning Programming in Python with Turtle Geometry* **Carol Angulo, Alberto J. Cañas, Ana Gabriela Castro, Leda Muñoz, Natalia Zamora.** *Think, Create and Program: Evolving to a K-9 Nationwide Computational Thinking Curriculum in Costa Rica* **Michael Weigend.** *Coding to Learn - Informatics in Science Education*	Session chair: **Carina Girvan** **Paper session 14:** room 302 **Girls in computing** **Bernadette Spieler, Wolfgang Slany.** *Female Teenagers and Coding: Create Gender Sensitive and Creative Learning Environments* **Caitlin Davey, Sawaros Thanapornsangsuth, Nathan Holbert.** *Making Together: Cultivating Community of Practice in an All-Girl Constructionist Learning Environment* **Sawaros Thanapornsangsuth, Nathan Holbert.** *Exploring Girls' Values and Perspectives in Making for Others*	Session chair: **Wilfried Baumann** **Workshop 3:** room 111 **Corey Brady, Walter Stroup, Tony Petrosino, Uri Wilensky.** *Group-based Simulation and Modelling: Technology Supports for Social Constructionism*
16^{00}–16^{30}	Coffee break		
16^{30}– 18^{30}	Session chair: **Witold Kranas** **Paper session 15:** room 301 **Constructionist environments** **Christos Chytas, Ira Diethelm.** *Designing Constructionist Learning Environments with Computational Design and Digital Fabrication* **Kazunari Ito.** *Pictogramming: Learning Environment Using Human Pictograms Based on Constructionism* **Kazunari Ito, Aoi Yoshida, Takashi Yoneda, Yuichi Oie.** *Human Pictogram Unplugged: Unified Learning Environment of Computer Science Unplugged Using Human Pictograms* **Nobuko Kishi, Mari Yoshida, Minori Yoshizawa, Aoi Yoshida.** *VISURATCTH: Visualization Tool for Finding Characteristics of Teaching and Learning Process of Scratch Programmers*	Session chair: **Michael Weigend** **Paper session 16:** room 302 **Modeling** **Natasa Grgurina, Erik Barendsen, Cor Suhre, Klaas van Veen, Bert Zwaneveld.** *Assessment of Modeling Projects in Informatics Class* **Kit Martin, Gabriella Anton.** *Modeling Time* **Ümit Aslan, Uri Wilensky.** *Agent-based Construction (a-b-c) Interviews: A Generative Case Study* **Yu Guo, Uri Wilensky.** *Mind the Gap: Teaching High School Students about Wealth Inequality through Agent-Based Participatory Simulations*	Session chair: **Brian Harvey** **Workshop 4:** room 111 **Ken Kahn.** *AI Programming in Snap!* **Workshop 5:** room 111 **Stephen Howell, Neeltje Berger, Peter Heldens, Kevin Marshall, Clare Riley.** *Developing Affordable STEM Maker Projects with BBC Micro:bits and Microsoft MakeCode*

Saturday, August 25 / Location: The Faculty of Philosophy (Universiteto St. 9)

8^{30}–10^{30}	Session chair: **Deborah Fields** **Plenary session IX:** room 301 **Chronis Kynigos.** *In Support of Integrated Approaches to Constructionist Designs and Interventions: The Case of ChoiCo and MaLT* **Arthur Hjorth.** *Social Gears - a Constructionist Approach to Social Studies*	Session chair: **Paul Goldenberg** **Plenary session X:** room 302 **Brian Harvey.** *May I Teach an Algorithm?* **Jens Mönig.** *Bones, Gears and Witchcraft*

10^{35}–11^{30}	Session chair: **Eugenijus Kurilovas** **Demo session 2:** room 301 **Nevin Akcay, Hulya Avci, Ali Güngör, Tufan Adiguzel.** *The Relationship between Computer Programming and English Language Skills* **Monica Chan, Gary Lee.** *Synthesizing the Mesh: Using Constructible Authentic Representations to Gain Intuitive Understanding of Bayesian Reasoning*	Session chair: **Christos Chytas** **Demo session 3:** room 302 **Ken Kahn.** *Interpolating (and Extrapolating) 3D Turtle Programs in Beetle Blocks* **Stephen Howell.** *Teaching Computational Thinking with Minecraft & Microsoft MakeCode*	Session chair: **Ralf Romeike** **Workshop 6:** room 111 **Brian Broll, Corey Brady, Ákos Lédeczi.** *NetsBlox: A Constructionist Environment for Creating Distributed Applications*
11^{30}–12^{00}	Closing: Farewell buffet / Location: Grand Courtyard		
13^{00}–20^{00}	Post Conference Excursions (not included in conference fee)		