

Family Creative Learning Workshop

Derek Breen (will recruit others from Lifelong Kindergarden/MIT Education Arcade)
(writer, Scratch For Kids For Dummies)

Wednesday 17:00-21:00 - Cat [Freestyle - 44]

Family Creative Learning is a workshop series developed by members of the Lifelong Kindergarden research group to engages children and their parents to learn together — as designers and inventors — through the use of creative technologies. This workshop would run in-tandem with the conference, making a space for children, i.e. Scratch USERS.

Werewolf

Drew Buddie (RMS/Naace)

Wednesday 17:00-21:00 - Cat [Freestyle - 77]

In this fun session Scratch and MakeyMakeys will be used as an interface (and to help build atmosphere) for a unique version of the well known party game 'Werewolf'.

Scratch Orchestra - creative learning community through collaborative performance

Yoshiro Miyata, Yasushi Harada, Nobuyuki Ueda, Tomohiro Ueshiba, Keiko Onishi
(Chukyo University)

Wednesday 17:00-21:00 - Cat [Freestyle - 109]

We will present the Scratch Orchestra, a new form of musical expression in which the high quality performance and the joy of making music together are united, and also local performance and global collaboration are united. We will demonstrate three learningscapes: learning through instruction, through design and through performance, to enjoy learning deeply and playfully.

Creative Computer Science | digital data driven dance

Genevieve Smith-Nunes (readysaltedcode CIC)

Thursday 10:30-11:30 - Cat [Ignite - 1]

Design Thinking and Scratch?

Emer Beamer (Unexpected, The Designathon School, Freedom Lab)

Thursday 10:30-11:30 - Cat [Ignite - 32]

How do children form their ideas of what they want to make and program in scratch?
(and how Design thinking and project based learning play a role in this)

The 3 Rs are covered; we know how to Read, Write and do Arithmetic. Time to Teach the 3 Ds: Design, Develop & Debug

Stephen Howell (Microsoft)

Thursday 10:30-11:30 - Cat [Ignite - 68]

This Ignite is a call to action for teachers everywhere, we must attack the digital literacy problem just as strongly as lexical literacy. Prof. Wing's Computational Thinking has emboldened a generation of teachers, but so many educators fear teaching technology that we must be evangelists in our schools and promulgate the 3 Ds of Design, Develop and Debug.

Turtlestitch

Andrea Mayr-Stalder, Michael Aschauer ()

Thursday 10:30-11:30 - Cat [Ignite - 121]

Presentation of the project ""Turtlestitch"" which provides an interface between Snap! and a stitching machine for output. The aim of the project is twofold, to experiment is generative aesthetics and serve as an environment for workshops for introducing the basics of programming for young people.

A Makerspace in Library

Luca Colciago (Fabriano Public Library Makerspace)

Thursday 10:30-11:30 - Cat [Ignite - 133]

The Fabriano public library (Marche, Italy) has created a Makerspace within the library . This makerspace intends to become an intergeneration opportunity for interaction and sharing of old and new technologies, old and new media, old and new experiences. Many activities and events involving our community are organized by passionate people, teachers, and students.

<http://goo.gl/07sk7t>

Physical computing in school with raspberry and scratch

Gerhard Hepp ()

Thursday 10:30-11:30 - Cat [Ignite - 142]

Physical computing at school, programming computer games with 7th grade kids , constructing their own controllers.

Platform is Scratch 1.4 on Raspberry Pi plus some electronics.

Using Scratch to develop computational thinking with primary age pupils

Phil Bagge (CAS)

Thursday 10:30-11:30 - Gobo [Talk - 122]

Over the last three years Phil has taught over 1200 hours of primary computing science at six primary schools in the UK. As well as sharing his journey with lots of other teachers via his code-it.co.uk website.

He is convinced that programming is the best way to use and teach about computational thinking and that Scratch is the premier tool for this.

Computational Thinking in the Schools of Spain and Latin America: more than just a MOOC, a community

Xabier Basogain et al. (University of the Basque Country)

Thursday 10:30-11:30 - Pico [Talk - 33]

The MOOC "Computational Thinking in the Schools" is a course offered through platform MiriadaX.

The course has been designed for teachers and those interested in learning how to solve problems through the use of the programming language Scratch.

The paper describes the creation of an active learning community and summarizes its structure and initial results.

Participants come from 35 countries.

Scratch activities in Hungary

Zsuzsa Pluhár (T@T Lab in Faculty of Informatics at Eötvös Lorán University)

Thursday 10:30-11:30 - Pico [Talk - 59]

Scratch is one of the possible tools to learn and teach computational thinking.

We have more activities to support teachers and kids using Scratch.

We would like to present you our teacher training activities and our tutorials not only for jung programmers but for kids with human interest too and about an Scratch competition for girls in a special program together with an foundation called Skool.

Africa Code Week 2015

Roger-Cyr Aplogan (Simplon.co)

Thursday 10:30-11:30 - Pico [Talk - 62]

Following on from success of last year's EU Code Week, the initiative is now extending to Africa. From 1-10 October 2015, children and young people are invited and encouraged to experience coding and strengthen their digital skills. NGOs and partners from industry, including key partner SAP, will organise coding workshops with various learning material (incl. Scratch) across 10 African countries.

The Beauty and Joy of Computing

Dan Garcia, Brian Harvey, Jens Moenig, Michael Ball (UC Berkeley)

Thursday 10:30-11:30 - Nano [Workshop - 113]

The Beauty and Joy of Computing (BJC) is a Snap!-based non-majors computer science curriculum aimed at bringing serious CS ideas such as recursion and higher order functions to a broad audience, with special emphasis on traditionally excluded groups including women and minorities. This workshop will allow participants explore the curriculum through gentle exercises, in a hands-on format.

Extend Scratch!

Shane Clements, Chris Willis-Ford, Sayamindu Dasgupta (MIT Media Lab)

Thursday 10:30-11:30 - Tera [Workshop - 73]

Scratch ""extensions"" let Scratch connect to the outside world, including web services (like weather databases and translation services) or physical devices (like sensors and robotics kits). This hands-on workshop will introduce extensions and help you make your own using the new ""scratchx.org"" extension development website.

Some knowledge of JavaScript required for participation in this workshop.

Scratch the code

Babken Chugaszyan ()

Thursday 12:00-13:00 - Cat [Ignite - 9]

This presentation is a summary of 2 year experience of 200 kids learning Scratch at ""Ayb"" school. It combines projects, reflections and discussion.

NextGen Scratch Wizkids

Arteesha Bosamia, Matthew Healey, Andrew Sula, Stephen Pithouse and Robert Sandford (Technology Volunteers)

Thursday 12:00-13:00 - Cat [Ignite - 38]

Technology Volunteers is an initiative where programmers and non-programmers work together to teach Scratch to children. With a live demonstration of ideas, this presentation will show how this cross-disciplinary team at University of Warwick in England brings a valuable range of perspectives to teaching Scratch. It will describe the impact Scratch has had on children in the local community.

Programmo anch'io

Alberto Barbero - Eleonora Pantò (DSCHOLA)

Thursday 12:00-13:00 - Cat [Ignite - 86]

DSCHOLA is a nonprofit italian association working in the Piedmont area (NW of Italy) to promote the enhancement in schools of the use of ICT in teaching and learning . One of the latest project, called ""Programmo anch'io"", financed by the Foundation Cassa di Risparmio di Torino, has involved 150 classes in 75 JH&H schools for a total of 3000 students (75 full days of CS education with Scratch).

Scratch in the Italian CoderDojo community

Carmelo Presicce (CoderDojo)

Thursday 12:00-13:00 - Cat [Ignite - 94]

CoderDojo is a global network of free, volunteer led, coding clubs for kids, in which young people usually start using Scratch, helped by mentors, following a constructionist approach.

I'll talk about CoderDojo as a learning environment as well as a creative community, sharing experiences from CoderDojo Bologna and from many other dojos I had the opportunity to visit and help in Italy.

Cogitate - Create - Code your own cartoon with Scratch Jr

Fleur-Eve Le Foll (Cod Cod Codet, by Maker Mind)

Thursday 12:00-13:00 - Cat [Ignite - 111]

With Scratch Jr and some unplugged activities, we are supporting 5-7 y.o. children, living in Morocco, to create their own cartoon via a 4 x 1.5 hours program.

Build your international Scratch-Wikis in your native language: World Wide Wikis

Martin Wollenweber & Linda Fernsel ()

Thursday 12:00-13:00 - Cat [Ignite - 125]

Founders and members of the german language Scratch Wiki (www.wiki.scratch-dach.info) want to help international Scratch communities to establish Scratch-Wikis in their own language. After we launched the German Wiki in 2012, last year followed an Indonesian and a Russian Wiki we are actively supporting and all of us are connected through interwiki. What's about your language?

Collaboration in the Scratch Online Community

Ricarose Roque and Eric Schilling (MIT Media Lab)

Thursday 12:00-13:00 - Gobo [Talk - 55]

In the Scratch online community, Scratchers can create, share, and remix projects as well as give feedback and discuss ideas. We'll share stories of creative and inspiring ways that Scratch members collaborate in the community. These collaborative activities are emergent and driven by Scratchers and include activities like multi-animator projects, sprite contests, and remixing chains.

EU Code Week

One of the EU Code Week Ambassadors (to be confirmed) ()

Thursday 12:00-13:00 - Gobo [Talk - 63]

1 week, 38 countries, 3000 activities, 100 000 + participants : EU Code Week 2014 was the biggest celebration of coding across Europe ! EU Code Week is returning this year from 10-18 October 2015, offering even more events for all kinds of groups: from beginners to advanced coders, for everyone from job-seekers looking to learn a new skill to robot fans and girl geeks.

Learning with Scratch

Carlos luis (Instituto do Emprego e Formação Profissional (IEFP))

Thursday 12:00-13:00 - Gobo [Talk - 72]

Our challenge was to develop basic skills in reading, writing, calculating and use of information / communication technology with pedagogical innovations for adults who do not have basic education skills. Interdisciplinary and complementarity assumed a particular teaching experience, with a focus on the use of Scratch to simplifies the creation and manipulation of stories.

Scratch Teachers in Estonia

Olga Mironova (Tallinn University of Technology)

Thursday 12:00-13:00 - Pico [Talk - 30]

Scratch Teachers in Estonia

Examples of different school lessons using Scratch made by teachers, who finished the course 'Fundamentals of Application Development and Programming' at Tallinn University of Technology. Their experience in applications development and teaching pupils. Methodical and didactic problems and tasks.

A New Subject in a New Curriculum: Exemplifying Computing Science in Scottish Schools using Scratch

Jeremy Scott (Royal Society of Edinburgh/George Heriot's School)

Thursday 12:00-13:00 - Pico [Talk - 135]

To reinvent our subject, we must provide learners with an experience of Computing Science (CS) that's accessible and exciting. Over the last three years, Jeremy Scott has led a national project to exemplify the teaching of CS in Scottish schools using Scratch. His curricula draw upon the latest pedagogical research to deliver the subject in a way that's relevant to learners' own digital lives.

Scratch curriculum in Brazil

Antonio Paes (Yadaa Escola de Programação e Robótica - www.yadaa.com.br)

Thursday 12:00-13:00 - Pico [Talk - 138]

On this talk we'll present our program used in Brazil where we mix programming effectively with math, physics and other science topics in a solid and proven program/curriculum.

Snap! - Play with APIs and OpenData with our Snap! extension

Bernat Romagosa (Citilab)

Thursday 12:00-13:00 - Nano [Workshop - 28]

Snap! is our home-brewed Snap! extension that targets APIs and OpenData. In this workshop we'll learn how to access and make use of REST APIs from a Snap!-like environment, all this while explaining our experiences with getting kids to understand and play with APIs.

New Dimensions to Scratch with littleBits and Leap Motion

Susan Ettenheim and Kreg Hanning (Eleanor Roosevelt High School)

Thursday 12:00-13:00 - Tera [Workshop - 107]

In this hands on workshop, you will use the extensions for littleBits and Leap Motion devices with Scratch 2.0 to remix projects that change what you see on the screen by interacting with the physical world. Using challenge activities participants will learn the concepts by remixing projects on the spot with live help. Reflection, documentation and community support will be discussed and shared.

All the programming parts of the English Computing National Curriculum for primary schools, using tablets, in an hour

Neil Rickus ()

Thursday 14:30-15:30 - Cat [Ignite - 25]

Since September 2014, English schools, as part of the new Computing curriculum, have to teach programming to children as young as five years old. During this session, we'll use a variety of apps, including Scratch Jr and Pyonkee, to undertake activities covering every programming concept expected of primary aged (five to eleven years) children. Bring along an iPad and join us for an hour of code!

Cat: A Computer Adaptive Test to Help Students Learn Programming

Jan Janiszewski (University of Amsterdam (currently University of California, Santa Barbara))

Thursday 14:30-15:30 - Cat [Ignite - 36]

With only limited external help from teachers, children often encounter difficulties in their learning process within the Scratch environment. Therefore, we created a computer adaptive test that assesses the programming ability of elementary school children and provides them with feedback on difficult programming concepts. We expect students to learn programming faster and become more motivated.

Doodling in Code: A simple framing of coding activity that invites creative exploration and playfulness

Adam Colestock (Francis W. Parker School)

Thursday 14:30-15:30 - Cat [Ignite - 70]

In my work teaching kids to program, I sometimes see kids overwhelmed by the scope of their favorite projects on the Scratch site and the ambitious games that they want to create. I propose that occasionally framing the work of coding as 'doodling' for developing programmers provides an entry point that is inviting and promotes exploration and play.

TeacherDojo: a social space for creating and learning

Agnese Addone (CoderDojo)

Thursday 14:30-15:30 - Cat [Ignite - 80]

TeacherDojo is a free workshop for school teachers created to promote different educational paradigms and to innovate teaching methods through digital technologies.

Inspired by the MIT Media Lab CCOW, it's designed by: the CoderDojos of Rome and Sigillo, the LTA Laboratory (Dep. of Education, UniRomaTre) and members of Learning Creative Learning community.

Computer Science at Primary Schools in the Portugal: and young teachers (mostly women)?

Joao Orvalho (Institute Politechnic of Coimbra)

Thursday 14:30-15:30 - Cat [Ignite - 92]

Sooner or later, Portugal will introduce CS at primary school. In Portugal the overwhelming majority of students in undergraduate education for primary school teachers are women. And then? In these last six years in Coimbra I have given training in computational thinking, using Scratch, to the future primary teachers in the 1st year of his undergraduation (teacher education) where 99% of the students is female.

Using Scratch with Education Sciences Students

Dimitris Nikolos (University of Patras, Greece)

Thursday 14:30-15:30 - Cat [Ignite - 139]

In the Department of Educational Sciences and Early Childhood Education, University of Patras, we teach Scratch to prospective early childhood teachers in an elective course. For three academic years we focused on different aspects of Scratch and used various approaches to teach them to our students. Our experiences and our future plans will be discussed in this talk.

Poppy-Project

Pierre Rouanet (Flowers Team - Inria)

Thursday 14:30-15:30 - Gobo [Talk - 18]

We will show how we connected Snap! to Poppy Creatures (<http://www.poppy-project.org>) which are fully open-source robots based on 3rd printing and dedicated to scientists, educators, developers and artists, that all share a vision: robots are powerful tools to learn and be creative.

We will show how using Snap! we can control in real time a full humanoid robot.

Scratch: a Tool for Gender Balance in IT

Linda Derksen & Lieke Boon (VHTO, Dutch Expert Organisation on Girls/Women and Science/Technology)

Thursday 14:30-15:30 - Gobo [Talk - 137]

In VHTO's primary school project 'Talentenkijsker', stereotypical thinking about science/tech and gender is challenged, and Scratch has been integrated into the project to teach pupils programming. VHTO will show

how Scratch can weaken stereotypical thinking about IT & gender. We'll present teachers' experiences with Scratch, and discuss about measures to increase the participation of women in IT.

Sniff - writing Scratch in text and creating IoT devices

Ian Stephenson, Tom Stacey (Bournemouth University)

Thursday 14:30-15:30 - Pico [Workshop - 11]

Join researchers from Bournemouth University in the UK who show you how to code in Sniff. This follow-on language from Scratch forgoes blocks and choosing, for text and writing. Unlike Python or C, you already know Sniff, because it is Scratch in text. You'll find you can write programs quickly, easily and elegantly because you already know it. This workshop session allows you to get hands-on.

Serious Science with Silly Sensors

Margaret Low, Andrew Sula, Arteesha Bosamia, Marie Low, Martin Luk, Matthew Healey, Robert Sandford, Stephen Pithouse, Tom Preece (University of Warwick)

Thursday 14:30-15:30 - Nano [Workshop - 69]

Young people are encouraged to carry out experiments in order to develop a better understanding of science. This workshop explores how we can sense events taking place around us, to gain an understanding of science. We will develop and calibrate some simple scientific instruments to carry out experiments. using picoboards and arduinos. Technology Volunteers www.warwick.ac.uk/techvolunteers

Fun with ScratchJr and other coding games

Mie Menmark (School)

Thursday 14:30-15:30 - Tera [Workshop - 23]

Try scratchJr and practical exercises in problem solving and learning to encode with and for preschool children.

Extending Scratch into the Real World with Hardware Extensions

Stephen Howell & TBD (Microsoft)

Thursday 16:00-17:00 - Cat [Discussion - 105]

This discussion on 'Extending Scratch' will provide a brief overview of some of the extensions available and in development for Scratch, along with some demo's of these extensions. The panel members will discuss the challenges of creating extensions and the benefits of deploying extensions in the classroom.

European Erasmus+ Program Training on Scratch

Samir Saidani ()

Thursday 16:00-17:00 - Cat [Discussion - 123]

Erasmus+ European Program is aimed to provide a way to organize collaborative meeting between european people, and beyond. We will present the Erasmus+ Program, some training we've already organized through this program and how to fund a Scratch Training based on Erasmus+ Program.

Peer Instruction for Scratch in Scratch

Peter Donaldson (Principal Teacher of Computing, Crieff High School & CAS Scotland committee member)

Thursday 16:00-17:00 - Gobo [Talk - 20]

Peer Instruction is a teaching technique designed to encourage all learners to make predictions and share their current understanding with each other. It's been used successfully in universities across the world but could it work in a high school context? This session will explain the PI process and how I've used it while stretching your brains with a PI session about Scratch in Scratch.

Dr.Scratch

Mari Luz Aguado ()

Thursday 16:00-17:00 - Gobo [Talk - 58]

The Dr. Scratch web application is an analytical tool that evaluates your Scratch projects in a variety of computational areas providing feedback. This analyzer is a helpful tool to evaluate your own projects, or those of your Scratch students.

It is suited to students of all ages because results shown are based on the level of Computational Thinking acquired by the students.

Simplify Scratch for teachers

Iris Douma ()

Thursday 16:00-17:00 - Gobo [Talk - 124]

Help to simplify scratch for a 'playful education toolkit' which does not scare teachers!
Short design session 15-30 min.

BeetleBlocks: 3D design and fabrication in a Snap-like environment

Duks Koschitz, Eric Rosenbaum, Jens Mönig, Bernat Romagosa (Citilab)

Thursday 16:00-17:00 - Pico [Workshop - 3]

BeetleBlocks is a visual, blocks-based programming environment for 3D design and fabrication. BeetleBlocks programs move a graphical ""beetle"" around a 3D world, where it can place 3D shapes, extrude its path as a tube, and generate geometry in other ways. The resulting 3D geometry can be exported as a 3D-printable file.

Build 3D Simulations with StarLogo Nova

Derek Breen (StarLogo Nova @ MIT (former curriculum and graphic designer))

Thursday 16:00-17:00 - Nano [Workshop - 43]

In this introductory workshop you will build an interactive, 3D simulation using StarLogo Nova. No prior programming experience is necessary. Please bring your own laptop.

Free Scratch from the evil Sulfator!

Pierre Morsa, Natacha Morsa, Mary Leviandier, Quentin Depuydt (Coding & Bricks)

Thursday 16:00-17:00 - Tera [Workshop - 74]

The evil Sulfator hates progress. he has kidnapped Scratch, to prevent children from learning how to code!

Will you manage to program Scratch and LEGO WeDo to rescue Scratch and save the children from Sulfator? Make the story progress by solving increasingly difficult puzzles, discover how Scratch and LEGO WeDo interact, and learn how to control the motor, tilt and motion sensors.

After Scratch: Logo(Writer)

Mike Doyle (The British School of Sofia)

Friday 10:30-11:30 - Cat [Ignite - 21]

The interventions of MIT Media Lab in education, turtle geometry and Scratch, are critically examined historically. It is noted that: Logo was never used in schools; 'Logo' was a philosophy inimical to curricula; Scratch was not designed for school use. LogoWriter, criticised in the 1980s, is extant and free. It offers computing environment that complements yet challenges the core curriculum.

Scratch on SqueakJS: No plugin required

Bert Freudenberg (CDG Labs)

Friday 10:30-11:30 - Cat [Ignite - 24]

Scratch was originally implemented in Squeak Smalltalk. These 1.x versions can now be run in a web browser thanks to SqueakJS:

<http://bertfreudenberg.github.io/SqueakJS/scratch/>

This is a full implementation of Squeak, so it is possible to look behind the scenes using the old shift-click-on-R trick.

GP: A Scratch-like Language for Applications

John Maloney, Jens Mönig, Yoshiki Oshima (CDG Labs (and also MIT Media Lab))

Friday 10:30-11:30 - Cat [Ignite - 47]

Have you ever wanted to use a Scratch-like programming system to build applications for your laptop or mobile device? Have you ever wanted to extend Scratch with new capabilities? This talk will provide a ""sneak peek"" at GP, a powerful new blocks language currently under development.

Creating a mobile App in 90 seconds

Dan Garcia (UC Berkeley)

Friday 10:30-11:30 - Cat [Ignite - 114]

Watch a live demo of the creation of a mobile app (whack Alonzo) in 90 seconds, start to finish!

Scratch projects on smartphone

Wolfgang Slany (Graz University of Technology)

Friday 10:30-11:30 - Cat [Ignite - 119]

I present a free service that allows to transform Scratch projects into Pocket Code programs that can be executed and, what's more, also directly edited on any smartphone or tablet. In fact the editing may be necessary to replace keyboard input by sensors or multi touch features built into the smartphones. Example: <http://scratch.mit.edu/projects/25397749/> and <https://pocketcode.org/details/1806>

Takeoff, Fly, Flip, and Land - Visual Programming for Drones/Quadcopters

Mike Chen ()

Friday 10:30-11:30 - Cat [Ignite - 132]

Drones/quadcopters are becoming popular for entertainment and photography. We designed a visual programming language, called Tickle, to program drones - turning them into opportunities for learning programming.

Sniff - A text based programming language for Scratchers

Tom Stacey, Ian Stephenson (Researcher - Bournemouth University)

Friday 10:30-11:30 - Gobo [Paper - 10]

Sniff is what Scratch would be if you wrote it down. It's a regular programming language that tries to be as much like Scratch as possible, but being text based it's much closer to being a traditional programming language. It lets experienced Scratchers use all their Scratch knowledge to write text based programs. In this paper we explore the challenges and present our current findings.

The SQLsnap! supermarket

Eckart Modrow (University of Goettingen)

Friday 10:30-11:30 - Gobo [Paper - 12]

Following the ideas of the "Beauty and Joy of Computing" within the context of German CS-curricula, I show how the use of computer systems in common social situations can be modelled algorithmically using Snap!. The necessary additional tools — easily derived from an example environment — are described and implemented. The results can be seen as SQLsnap! on <http://snapextensions.uni-goettingen.de>.

HelloScratchJr.org: Curricular Design and Assessment Tools to Foster the Integration of ScratchJr and Computational Thinking into K-2 Classrooms

J.C. Olabe et al. (Christian Brothers University)

Friday 10:30-11:30 - Gobo [Paper - 34]

This paper presents an open website, HelloScratchJr.org, where K-2 teachers and students access curricular material and assessment tools. The site is intended to facilitate the integration of Computational Thinking, using ScratchJr, during the first years of primary school. These resources address the key factors for the success of school initiatives entering the field of computational thinking.

Analyze your Scratch projects with Dr. Scratch and assess your Computational Thinking skills

Jesús Moreno-León, Gregorio Robles (Programamos.es)

Friday 10:30-11:30 - Gobo [Paper - 64]

In this paper we present the procedure used by the Dr. Scratch tool to automatically assess the development of Computational Thinking (CT) demonstrated by the developer of a Scratch project. The paper reviews similar initiatives, like Hairball, and investigates the literature with proposals for assessment of Scratch projects that we have studied and remixed in order to develop the CT analysis.

Web platform to support teaching programming with Snap! and manage pupils' learning

Sébastien Combéfis and Chantal Poncin (Computer Science and IT in Education)

Friday 10:30-11:30 - Gobo [Paper - 91]

This work is about the development of a web platform dedicated to pupils between 10 and 14 years old that support them in their learning of programming. The developed platform uses Snap! and adds a lightweight LMS. The goals of the LMS is to help teachers to manage activities and lessons to build courses to be followed by their pupils.

Measuring the centralized mindset in Scratch

Dimitris Nikolos, Vassilis Komis (Department of Educational Sciences and Early Childhood Education)

Friday 10:30-11:30 - Gobo [Paper - 100]

This paper describes an effort to measure the centralized control of Scratch projects using social networks analysis software. We developed software to transform the structure of Scratch projects into networks. The theory of centrality and centralization of social networks can then be applied to the structure of a Scratch project providing measurements for the centralized mindset of the creator.

Explaining Chemistry with Scratch

Michael Weigend (Holzkamp-Gesamtschule)

Friday 10:30-11:30 - Gobo [Paper - 104]

Creating and discussing Scratch animations can make chemistry education more interesting and profitable. This contribution presents examples explaining the mechanisms of chemical reactions, properties of organic compounds and general chemical principles. Students get the opportunity to develop creativity while explicating mental models about theoretical concepts.

Snap4Arduino

Bernat Romagosa (Citilab)

Friday 10:30-11:30 - Pico [Talk - 31]

After explaining how we developed Snap4Arduino and its relation to our previous S4A project, we will offer a live demo in which we will build, program and (try to) play a Theremin musical instrument.

Extending Snap! for OOP

Jens Mönig (CDG Labs), Brian Harvey (UC Berkeley) (CDG Labs, SAP Research)

Friday 10:30-11:30 - Pico [Talk - 79]

The next version of Snap! will provide prototypal inheritance, letting students model cascading dynamic bindings for field-variables, custom blocks, sprite attributes and media. With this mechanism students can classify concrete behavioral strains into more abstract prototypes and turn these into powerful classes. Thus, Snap! will be able to support a rigorous introductory OOP curriculum.

The new 'Kinect 2 Scratch', a toolkit for developing Natural User Interface games in Scratch 2.0 using the new Kinect v2.

Stephen Howell, Scott Blackwell (Microsoft)

Friday 10:30-11:30 - Pico [Talk - 101]

We present the new Kinect 2 Scratch which connects Scratch 1.4/2.0 & Kinect v1/v2 (for Xbox One). The original software was released in January 2011, and has been downloaded thousands of times and used worldwide. This free software allows anyone code for the body tracking Kinect sensor using Scratch. We will focus on the updated features, supporting educational material and the 2015 schools pilot

Scratch in Science: Creating Experiments and Making Sense of the Data

Steve Holmes (Educator)

Friday 10:30-11:30 - Nano [Workshop - 75]

We will explore the learning opportunities available through connecting sensors to Scratch. The Make!Sense analog sensor board and Wii Remote/Balance board will be used to give lessons about real time data streaming and data collection/analysis.

Scratch's easy programming environment allows primary and secondary students with no programming experience to write code to collect and analyse data.

From traffic lights to parent detectors: physical computing with Scratch and the Raspberry Pi

Clive Beale (Raspberry Pi Foundation)

Friday 10:30-11:30 - Nano [Workshop - 141]

Break out of the screen and control the outside world with Scratch and the Raspberry Pi!

This is a hands on session where you will learn how to connect LEDs, buttons, motors and sensors to the Pi and control them using Scratch. With these few basic skills you will be able to build your own robot or even a parent detector for your bedroom.

Unleash your Arduino !

Romain Liblau, Alexandre Lamandé, Belaid Abdellah, François Sylvestre, Loïc Tangre (Magic Makers)

Friday 10:30-11:30 - Tera [Workshop - 89]

Have you been showing kids how to tinker with Arduino on Scratch? Did they ever wish they could get rid of the usb cable in order to create stand-alone objects? Well now they can !! Working with engineering students from Sup Galilée (Paris), Magic Makers released a tool allowing you to load your Scratch projects on an Arduino and pull the plug ! Come and try it with our hands on session !

Coding with ScratchJr, students 6-9 years old

Mie Menmark (School)

Friday 12:00-13:00 - Cat [Ignite - 22]

Nothing is impossible. We are learning a new language, programming language. We use scratchJr along with other programming apps and practical exercises in preschool to year3 in school subjects and at leisure. The digital tools are a natural and vital part of learning. Everyone can! Everything becomes possible.

Come and see and try on my workshop.

Writing a Scratch Book for Girls (and Boys)

Derek Breen (writer, Scratch For Kids For Dummies)

Friday 12:00-13:00 - Cat [Ignite - 40]

When commissioned to write a book about Scratch targeting children from eight- to twelve-years-old I had two main priorities: emphasize design over coding and strike a balance between projects which would appeal to girls vs. boys. Fortunately I had two target readers in my family, my nine-year-old niece and eleven-year-old nephew. Each would challenge me to make the book ""more for them.""

Block languages for the visually impaired

Brian Harvey (University of California)

Friday 12:00-13:00 - Cat [Ignite - 78]

Block languages (Scratch, Snap!, Blockly, App Inventor, StarLogo TNG) have had a surge of popularity in introductory computer science curricula because of their strong appeal to traditionally underrepresented groups, especially girls. But they threaten to exclude one group: the visually impaired. How can we extend software and curricula to solve this problem?

Robot-Puppet Show with Scratch and Aisoy1

Frank Sabaté (Escola Projecte)

Friday 12:00-13:00 - Cat [Ignite - 84]

Ten year-old students, in pairs, direct a puppet show. They've got two actors: two Aisoy1 robots. During a whole term, they write the script, create the scenarios, make the costumes (with the help of a group of grandmothers) and they program the show using Scratch 2 and the Aisoy extension. Finally, the shows are represented to their partners and recorded.

Using Scratch Jr as a learning support tool in Kindergarten

Angela Sofia Lombardo ()

Friday 12:00-13:00 - Cat [Ignite - 90]

I will share my experience as a learning support teacher, introducing Scratch Jr to a 5 years old kindergartener as a cognitive stimulation tool. This rapidly became an experience of empowering socialization between peers and expressing emotion through creativity.

Scratch to school - helping with learning difficulties

Daniela Guengant & Claude Terosier (Magic Makers)

Friday 12:00-13:00 - Cat [Ignite - 95]

Sharing insights on the impact of creative computing workshops on high school kids with learning difficulties. Based on a serie of workshops led in a Parisian High School with kids 12 to 14.

Scratch in the classroom: a teacher training experience in Brazil

Adelmo Eloy, Eduardo Aranibar Silva ()

Friday 12:00-13:00 - Cat [Ignite - 146]

Scratch is an innovative tool for teaching computational thinking, capable of creating positive impact on how one learns and thinks. However, in order to achieve massive scale in Brazil, it will be necessary to integrate the tool and the concepts with traditional elements of the school, from curriculum to teachers.

When the Chicken met the Robot

Mags Amond & Gillian Connolly (CESI and Coderdojo)

Friday 12:00-13:00 - Gobo [Talk - 15]

Developing the intersection between pedagogy and "techagogy" - how teachers need to bring more computational thinking into their practice, and techies need to bring more pedagogy into their explanations. Mags the Teacher and Gillian the Techie met by chance, having each taken steps into each others' world via Coderdojo. In this presentation we'll tell the story so far...

Don't think like a computer, think like a computer scientist!

Michael Lodi (CoderDojo Bologna, Università di Bologna - Italy)

Friday 12:00-13:00 - Gobo [Talk - 76]

The importance of computational thinking in computer science education is clear.

But it can also teach some very relevant life skills for all, like systematic thinking, decomposition, acceptance of uncertainty of the result, being less ambiguous in giving instruction, paying attention to efficiency, iterate and collaborate.

Science shows these skills can boost nothing less than our happiness :-)

'What I hear I forget, what I see I remember, what I do I understand.' Lessons learned: 2 years Fabschool kids.

Henk Buursen, Karien Vermeulen (Waag Society / Fabschool)

Friday 12:00-13:00 - Gobo [Talk - 118]

Making is a trend. And is fun. But more than fun for many people, making is a fundamental intrinsic need. In creating the world we encounter, we get

new experiences and learn about what works and what does not. Making leads to new insights and opportunities. And "Learning by making" provides a wealth of opportunities for education.

Project Spark: How building 3D fantasy worlds can be the perfect introduction to block based coding.

Stephen Howell, Scott Blackwell (Microsoft)

Friday 12:00-13:00 - Pico [Talk - 106]

Project Spark is like Scratch; a powerful, yet simple way to build and play your own worlds, stories and games. Project Spark is developed by Microsoft, and is an evolution of Kodu. This presentation will show how reprogramming an angry goblin to be your best friend can teach boolean logic while also being incredibly awesome. We will also showcase the free video course we made for Spark.

Tickle: Visual Programming meets Arduino, Connected Toys, and Smart Homes

Mike Chen ()

Friday 12:00-13:00 - Pico [Talk - 131]

Tickle is a visual programming language for the iPad, inspired by Scratch and Blockly. It's designed to enable anyone to easily program smart devices - without wires and installing extensions. Attendees will get a chance to program a variety of Bluetooth and Wi-Fi devices using Tickle, and learn which ones are best for their educational programs. *Please bring an iPad if you have one.

Pixie: learn how to program step by step

Luis Carbajosa (Pixie Code SL)

Friday 12:00-13:00 - Pico [Talk - 136]

PIXIE is a support system to teach programming created from a standard system based on visual blocks of code inspired by Scratch and based on Blockly. PIXIE develops a whole ecosystem of academic management, courses, classes and teaching materials, all organized around a completely integrated programming environment.

Hip-Hop Dance and Scratch

Ricarose Roque and Eric Schilling (MIT Media Lab)

Friday 12:00-13:00 - Nano [Workshop - 54]

Join the MIT Scratch Team in a hip-hop dance workshop using Scratch. In this workshop, we'll program hip-hop dance moves, such as popping and toprocking. Afterwards, we'll share our projects and discuss other interest-based pathways into Scratch. This project is part of an initiative with the DML Research Hub and the Harvard Berkman Center for Internet & Society. No prior dance skills required.

Bots and Bees

Susan Nic Réamoinn (Griffen Valley Educate Together N.S.)

Friday 12:00-13:00 - Tera [Workshop - 96]

Beebots, Ohbot and Pi2Go: we're all about the robotics! Come along and join in the fun of language sharing and robotic coding. We use robots for oral language development and coding in the early years. See our little bees in motion and share your language with us.

The Beauty and Joy of Computing -- Intro CS for the world

Brian Harvey, Daniel D. Garcia (University of California)

Friday 14:30-15:30 - Cat [Talk - 83]

The Beauty and Joy of Computing (BJC) is a Snap!-based intro computer science curriculum aimed at bringing serious CS ideas such as recursion and higher order functions to a broad audience, with special emphasis on traditionally excluded groups including women and minorities. We'll describe our current work bringing BJC to New York City, and invite translations for non-US audiences.

Bringing the Beauty and Joy of Computing to the World via edX

Dan Garcia, Brian Harvey, Jens Moenig, Michael Ball (UC Berkeley)

Friday 14:30-15:30 - Cat [Talk - 116]

After five years of offering professional development to over 200 high school teachers, the Beauty and Joy of Computing (BJC) team decided to embark on a project with global reach: building a massive open online course (MOOC) for their BJC course, complete with autograding, peer grading, inspiring videos, quizzes, and a learning community. This talk will offer a sneak peek; it launches Fall 2015.

Moving from Paper to Scratch to Python

David Ames (Edge Hill University/Computing At School)

Friday 14:30-15:30 - Gobo [Talk - 19]

A whistle stop, hands on, tour of how I've used both Scratch and Python in an introductory programming course with 11-14 year olds. With a focus on drawing out the links between how students plan out what they're going to do, how they would do it using Scratch and then how they might implement the same structures using Python.

What is the best way to move from Scratch towards other programming languages?

Lars Kobbe ()

Friday 14:30-15:30 - Gobo [Talk - 82]

This session addresses the question of how to help experienced Scratchers (yet otherwise beginners) move from Scratch to mainstream programming languages and reduce the typical frustration of beginners. We will review and discuss what makes Scratch (both as a language and as a platform) so engaging and fun and to what degree this experience can be re-created with other languages and platforms.

Bridging the Gap between Blocks and Text via Game Development

Ursula Wolz (RiverSound Solutions)

Friday 14:30-15:30 - Gobo [Talk - 129]

There is anecdotal evidence that Scratchers may struggle with text-based programming. This workshop presents a series of exercises developed in response to middle school students' request to move to Java. Eight small Scratch programs are introduced that cover the essentials of coding and game design. Ten Processing examples follow covering the same concepts. All were tested by 4th - 9th graders.

Teaching debugging in Scratch

Miles Berry (University of Roehampton)

Friday 14:30-15:30 - Pico [Talk - 87]

After an introduction to the importance of debugging for the development of computational thinking and developing resilience, drawing on the work of Papert, Dweck and others, Miles explores common types of bug in Scratch code, strategies for debugging and approaches to teaching this vital skill in school or clubs. There'll be ample time for participants to discuss how they tackle debugging.

Round the Circuit - using unconventional methods to control Scratch

Drew Buddie & Sinead Moxham (Royal Masonic School/Naace)

Friday 14:30-15:30 - Nano [Workshop - 17]

There is a technological and creative revolution underway, as educators we need to plan beyond the horizon. This workshop is designed to help you gain inspiration and hands-on practical guidance around

the use and integration of technology across the entire school system by designing alternative controllers for your Scratch programs.

Hello Ruby, unplugged activities for young learners

Linda Liukas (helloruby.com)

Friday 14:30-15:30 - Tera [Workshop - 144]

Hello Ruby is a celebration of computing: from its immense philosophies to the tiniest booleans - and everything in between. Ruby is a small girl with a big imagination: her animal friends help her navigate through sometimes seemingly irrational world. In some ways she's like Calvin from Calvin & Hobbes, in others she's like Pippi Longstockings. Ruby's world has rules and reason, repetition and rh

Pedagogy for Tomorrow

Lilli Meloche (Calgary Board of Education)

Friday 16:00-17:00 - Donut [Poster - 7]

Pedagogy for Tomorrow:

How Scratch makes learning come to life for primary school students.

The excitement in learning that coding in Scratch brings to my grade 4 students is awe-inspiring. Coding with Scratch facilitates deeper engagement and personalized learning in every subject. Students are creators not consumers. 'Flat Scratchy', tour guide, builds relationships across borders.

Tablet Scratch

Shane M. Clements and Chris Willis-Ford (MIT Media Lab (Scratch Team))

Friday 16:00-17:00 - Donut [Poster - 14]

Scratch is now on tablets! Come play with this new version of Scratch and take this opportunity to speak with MIT Scratch Team members about the new design. Though it's still under development, you can try out projects from the Scratch website or create a new one. We'd love to hear what you think!

Ten Different Ways to Teach Algorithms

Drew Buddie (Royal Masonic School & Naace)

Friday 16:00-17:00 - Donut [Poster - 16]

This presentation of a hands-on workshop will look at how Scratch can be combined with a range of alternative tools to teach the concept of algorithms. Attendees will leave with tried and tested practical examples to use in the classroom.

Tangible Programming

Tomohito Yashiro, Kazushi Mukaiyama (Future University Hakodate)

Friday 16:00-17:00 - Donut [Poster - 27]

Tangible Programming, previously named as Material Programming, is a programming learning environment using physical blocks.

In this conference, we show a latest demonstration of Tangible Programming. Also, we report how people used Tangible Programming.

Through this demonstration, we would like to discuss the possibility of Tangible Programming system with all attendees.

Scratch@Citilab

Bernat Romagosa (Citilab)

Friday 16:00-17:00 - Donut [Poster - 29]

Come visit us to live-try and discuss with us the different projects we've developed or participated in during these 8 years of Scratch-related activity at the Citilab.

Scratch, away from the computer screen

Stephen Pithouse (Technology Volunteers)

Friday 16:00-17:00 - Donut [Poster - 35]

Using the Raspberry Pi GPIO to interact with Scratch, with flashing lights, displays and buttons.

Imagine Scratch in 3D

Derek Breen (StarLogo Nova @ MIT (former curriculum and graphic designer))

Friday 16:00-17:00 - Donut [Poster - 42]

StarLogo Nova brings blocks-based programming into the third dimension. While StarLogo TNG added blocks and a 3D workspace, Nova is a more streamlined simulation and game development tool, running in the browser and taking full advantage of cloud-based services. Best of all it is free to use and available right now at www.slnova.org!

GP: A Scratch-like Language for Applications

John Maloney, Jens Mönig, Yoshiki Ohshima (CDG Labs (and also MIT Media Lab))

Friday 16:00-17:00 - Donut [Poster - 52]

This poster session will present GP, a new, Scratch-like blocks language that can deploy finished applications. GP (currently under development) can be extended by writing code as either text or blocks. Stop by for a demo and let us know what you think.

Interactive Computer Science Learning Tools for Adults

Arteesha Bosamia ()

Friday 16:00-17:00 - Donut [Poster - 56]

Interactive mobile tool for adults to learn Computer Science concepts.

No One Left Behind - Unlocking inclusive gaming creation and experiences in formal learning situations

Anja Petri (Graz University of Technology)

Friday 16:00-17:00 - Donut [Poster - 60]

In the European project No One Left Behind we aim to include digital game-based learning into the school curriculum. It will unlock inclusive gaming creation in formal learning situations. By using Pocket Code teens can create games on their mobile devices, with the aim of enhancing their abilities across all academic subjects, as well as their computational thinking, creativity and social skills.

When sharing computer science with everyone also helps avoiding digital prejudices: a practice report.

Marie Dufлот, Martin Quinson, Florent Masegla, Didier Roy, Julien Vaubourg (Inria)

Friday 16:00-17:00 - Donut [Poster - 65]

We, computer scientists, have to increase human knowledge, e.g. help to better understand what is mechanical intelligence. But we also have the duty to share this knowledge with everyone. To be sure that no one endures, whereas each one benefits from the derived technology. To this end, creative computing with Scratch, unplug activities, and playful robotics are our best friends. Let us witness.

Scratch on paper

Cobie van de Ven (Digitaal Laboratorium)

Friday 16:00-17:00 - Donut [Poster - 71]

Can we design paper games for a nice introduction or a better understanding of concepts of computational thinking. We show some examples and may be this is an inspiration to come with more ideas.

Robot-Puppet Show with Scratch and Aisoy1

Frank Sabaté (Escola Projecte)

Friday 16:00-17:00 - Donut [Poster - 85]

Ten year-old students, in pairs, direct a puppet show. They've got two actors: two Aisoy1 robots. During a whole term, they write the script, create the scenarios, make the costumes (with the help of a group of grandmothers) and they program the show using Scratch 2 and the Aisoy extension. Finally, the shows are represented to their partners and recorded.

Unleash your Arduino !

Romain Liblau, Alexandre Lamandé, Belaid ABBdellah, François Sylvestre, Loïc Tangre (Magic Makers)

Friday 16:00-17:00 - Donut [Poster - 88]

Have you been showing kids how to tinker with Arduino on Scratch? Did they ever wish they could get rid of the usb cable in order to create stand-alone objects? Well now they can !! Working with engineering students from Sup Galilée (Paris), Magic Makers released a tool allowing you to load your Scratch projects on an Arduino and pull the plug ! Come check this out at our tour booth.

Interact with Scratch using your mind

Carmelo Presicce (CoderDojo)

Friday 16:00-17:00 - Donut [Poster - 93]

Have you ever dreamed about moving objects using your mind? You can do it with Scratch! MindWave Scratch extension works with a low-cost EEG headset, Neurosky Mindwave, that can detect your concentration and meditation levels, processing your brainwaves. Data can be used in Scratch projects in real time to create mind controlled games and thought driven animations. Come and try it yourself!

Kinect 2 Scratch: A Skeletal Tracking Extension for Scratch to Enable Natural User Interface Development with K-12 Students

Stephen Howell (Microsoft)

Friday 16:00-17:00 - Donut [Poster - 103]

The new Kinect 2 Scratch connects Scratch 1.4/2.0 with Kinect v1/v2 (for Xbox One). This free software allows anyone code for the body tracking Kinect sensor using Scratch. This poster describes the updated features, educational material and results of the 2015 schools pilot

A smart girl writes code

Sandra Bosch and Ines Duits (Slimme meisjes programmeren (ebook))

Friday 16:00-17:00 - Donut [Poster - 108]

Ines Duits created a book for girls. The main concept is that programming doesn't make you a technical person, but a creative one. Now more then even, girls are producing media. They upload to their youtube accounts, they write blogs and create fan art. It would be a real shame if these girls would not be able to code, because it will limit them and make them dependend on those who can.

The Beauty and Joy of Computing and the Snap! programming language

Dan Garcia, Brian Harvey, Jens Moenig, Michael Ball (UC Berkeley)

Friday 16:00-17:00 - Donut [Poster - 115]

The Beauty and Joy of Computing (BJC) is a Snap!-based non-majors computer science curriculum aimed at bringing serious CS ideas such as recursion and higher order functions to a broad audience, with special emphasis on traditionally excluded groups including women and minorities.

Scratch in Teacher Education in Iceland

Salvor Gissurardottir (School of Education, University of Iceland)

Friday 16:00-17:00 - Donut [Poster - 117]

This paper discusses ways how Scratch could be introduced into teacher education. From 2012 to 2014 Scratch has been used to introduce first year teacher education class in Iceland to coding and programming but also as an environment to collaborate with others and remix and tinker and prepare for IoT environment of tomorrow. The aim is to prepare future teacher who can be agents of change.

Fabschool / Cryptokids

Henk Buursen, Karien Vermeulen, Robin van Westen (Waag Society/fabschool/cryptokids)

Friday 16:00-17:00 - Donut [Poster - 120]

We will present fabschool & cryptokids:

Fabschool: age 8-12 learn how to make, to explore technology and work with machines.

Cryptokids: Hacking, networks and privacy are keywords for this cryptoparty for kids.

Teaching abstraction in computer science through the use of Scratch

Dr. Michal Armoni ()

Friday 16:00-17:00 - Donut [Poster - 126]

Abstraction is one of the most fundamental ideas in computer science (CS). However, teaching this soft concept to novices is a very complicated task. In our research we examine a simple pedagogical strategy for teaching abstraction as part of an introductory CS unit to 7th graders. This unit covers basic ideas of CS through the use of Scratch.

Byte sized videos to jump start coding in Scratch, Snap and Processing

Ursula Wolz, Chris Dunne (RiverSound Solutions)

Friday 16:00-17:00 - Donut [Poster - 128]

Video tutorials are all the rage for providing blended instruction. This presentation demonstrates key elements to a good video production that has been field tested with Scratchers aged 9 - 14. Developed with Chris Dunne, aka Wodunne in the Scratch community our technique provides immediate, efficient information for novice and intermediate programmers.

Tickle: Visual Programming for Internet of Things (IoT)

Mike Chen ()

Friday 16:00-17:00 - Donut [Poster - 134]

Our world is rapidly becoming wirelessly connected. Tickle is a visual programming language explicitly designed for Internet of Things. Come try a variety of Bluetooth/Wi-Fi devices that you can program right from your iPad, including drones, robots, Arduino, and smart home devices.

Using Scratch to reduce conflicts and increase self-esteem

Helena Romano, João Torres, Miguel Figueiredo (EduScratch - ICT Competence Centre of School of Education - Polytechnic Institute of Setúbal)

Friday 16:00-17:00 - Donut [Poster - 143]

EduScratch and CPCJ Setúbal, Portugal, implemented a club with the class teacher. Several activities were developed so that 16 students, who have failed once at least, were trained in Scratch. Some pupils became monitors and began to set up the Scratch Programming Club, taking full responsibility for the preparation of the materials and training their peers. The project achieved its objectives.

Build your international Scratch-Wikis in your native language: World Wide Wikis

Martin Wollenweber, Linda Fernsel (<http://scratch-dach.info/>)

Friday 16:00-17:00 - Donut [Poster - 145]

Founders and members of the German language Scratch Wiki want to help international Scratch communities establish Scratch-Wikis in their own language. After we launched the German Wiki in 2012, last year followed an Indonesian and a Russian Wiki that we are actively supporting and all of us are connected through interwiki. What about your language?

Connecting Scratch 2.0 with... everything!

Massimo Avvisati ()

Saturday 10:30-11:30 - Cat [Talk - 39]

Scratch 2.0 offline editor offers the opportunity to all developers to create interesting extensions. In this short presentation we'll see how to connect Scratch to a Processing ""helper"" enabling us to write customized blocks capable to communicate to any kind of software or hardware! Internet of Things, online services or 3D video-games are just some examples of how this strategy can help educational projects to go beyond Scratch limits!

Programming minecraft on the raspberry pi

Sarah Zaman ()

Saturday 10:30-11:30 - Cat [Talk - 130]

Have fun changing the minecraft world using python on the raspberry pi.

A bear called Babbage: the story of the Raspberry Pi community

Clive Beale (Raspberry Pi Foundation)

Saturday 10:30-11:30 - Cat [Talk - 140]

In three years Raspberry Pi has sold over 5 million computers. But behind the hardware lies one of the strongest, proactive and most respected communities in computing education and the creative maker movement.

This is the story of how we built the Pi community and, more importantly, how the community built us.

The power of cloud: Teach physical computing to kids by running SNAP on an Arduino Yun.

Valentina Chinnici (Makerini & Arduino)

Saturday 10:30-11:30 - Gobo [Workshop - 127]

The aim of the workshop is to create an affordable and easy-to-use tool to get started with physical computing, even in contexts where there's no access to Internet.

This workshop is addressed to educators and teachers interested in using Arduino within their classroom, using an intuitive and visual programming language, called SNAP, to get started with Arduino.

The mobile way of game creation - Pocket Code

Christian Schindler (Post doc project assistant @ Graz University of Technology)

Saturday 10:30-11:30 - Pico [Workshop - 66]

This workshop provides a quick introduction to Pocket Code. When you know Scratch you can work with Pocket Code within minutes. We will finish a small tutorial game which enables you to implement your own ideas on your mobile device and face the upcoming "Pocket Jam"-challenge which is organized by Bernadette Spieler and featured by Jonathan Smith (LEGO Games producer and Co-Director of GameCity).

Create Real Apps With Blocks

John Maloney, Jens Mönig, and Yoshiki Ohshima (CDG Labs)

Saturday 10:30-11:30 - Tera [Workshop - 57]

Join us for a hands-on "sneak preview" of a new programming system that lets you turn your blocks projects into native apps that you can share and distribute. In this workshop, you'll try out a pre-alpha prototype of GP, a new blocks-all-the-way-down language that looks and feels similar to Scratch, but adds capabilities to create and deploy bigger and more complex projects. Limit: 30.

How (the Heck) To Write a Scratch Book

Derek Breen, Majed Marji, Sean McManus, Timothy Warner, Brandon Milonovich, Michael Badger (writer, Scratch For Kids For Dummies)

Saturday 12:00-13:00 - Cat [Discussion - 41]

Okay, we know books are not ""dead,"" contrary to the perennial media hype around new technology. But how do you engage young, twenty-first century readers in reading about an inherently visual/interactive platform such as Scratch? And is it worth even trying to compete with YouTube, Vimeo and Scratch itself (where users are already teaching each other via rich-media tutorial projects)?

SQLsnap! - Snap! with some extensions

Eckart Modrow (University of Goettingen)

Saturday 12:00-13:00 - Gobo [Workshop - 13]

SQLsnap! - Snap! with some extensions

A workshop to explore the capabilities of SQLsnap!

How to Setup a Kinect Enabled Classroom and Teach Natural User Interface Development to a K-12 Audience (uses Kinect 2 Scratch)

Stephen Howell, Scott Blackwell (Microsoft)

Saturday 12:00-13:00 - Pico [Workshop - 102]

The Kinect is a motion sensitive, skeletal tracking camera developed by Microsoft for Xbox. We developed a hardware extension for Scratch to use the Kinect.

This workshop will focus on:

1. Design considerations for Kinect in the classroom
 2. How to setup a Kinect with your PC (Software and Hardware)
 3. Educational materials to help teach the class
 4. Writing Kinect enabled Scratch programs
-

Scratching through the ceiling

Richard Millwood, Nina Bresnihan, Jake Byrne, Glenn Strong (Trinity College, Dublin)

Saturday 12:00-13:00 - Nano [Workshop - 98]

One kid says: "why can't I have a high ceiling in Scratch?". Another says "low ceiling is fine, get a life and learn Python!" Who is right? Why can't we tackle as complex problems as we like with Scratch? Why not have a wider range of real-world micro-worlds, full-on debug tools, computer science feature set, Github style collaboration, code rewind? There's only one way to settle this - fight!
