A Computer You Can Climb

Screen-free digital literacy through play, design, and neighbourhood infrastructure

Hello Ruby is a Helsinki/Paris-based company. We use storytelling and design to make complex systems understandable, especially computing and the invisible infrastructures of everyday life. Our learning is intentionally screen-free and hands-on: children learn through building, mapping, roleplay, tinkering, and outdoor play.

Ruoholahti is the first proof of concept: a screen-free computer-themed playground built with the City of Helsinki where children explore algorithms, binary, input/output, and debugging with their bodies.

Playgrounds are rare civic infrastructure for people still learning how the world works. They are public, social, and physical. Now we want to expand beyond one playground. The goal is a first release of play patterns as well as playgrounds for the ideas kids now grow up with: chips and circuits, the internet, artificial intelligence, early computing, synthetic biology, and quantum computing.

Play has done this before. Fröbel's kindergarten gifts taught structure and pattern through the hands, with echoes in modernism. Aldo van Eyck later built a new playground grammar from a few repeatable elements and spread it across Amsterdam. That is why this matters. Children need ways to understand computation that are not limited to screens. Public, physical forms let them feel these ideas early, practice them with others, and build confidence to shape the world they inherit.

Partner asks (what we're looking for)

We're looking for partners who can take one of these roles in a new pilot:

City representation / public authority (parks + education + urban planning): provide a site, align permits and policy, and coordinate funding so the project integrates into public-space strategy and school use.

Flagship project: Ruoholahti Computer Playground (Helsinki, 2023)
Picture by: Sakari Röyskö / Helsinki

Local infrastructure + landscape architecture partner: lead site works and integration (surfacing, lighting, planting, access, fencing/signage), and adapt the design to local standards and climate.

Local educational partner (schools / museum / teacher training org): align activities with local curricula, design workshops and guided sessions, and activate the playground as a learning hub beyond free play.

Community liaison (local NGO / neighbourhood org): run participatory co-design with families, schools, and advocacy groups, gather feedback, and help build long-term community ownership of the space.

Evaluation + impact partner (12 months): lightweight, credible evaluation of learning + inclusion + public use.

Theme advisors / sponsors (e.g., semiconductors, AI, bio, quantum): help ensure each pattern set is accurate, culturally appropriate, and fundable as a module.

WHY IT MATTERS

We treat learning as neighbourhood infrastructure: inclusive, welcoming, and rooted in place. The work supports:

Social inclusion (multiple entry points; no device access required)

Local participation (shared public spaces; community use; school visits)

Green transition (systems thinking; stewardship/maintenance culture; circular approaches to public assets)

Website:
helloruby.com/about
lindaliukas.com/playground

design.hel.fi/en/themed-play
https://lindaliukas.com/playground.html

monstrum.dk/en/playground/computer-playground

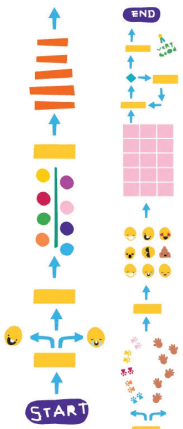
How the Playground Teaches

The examples on the next pages show how the Ruoholahti playground is used in practice.

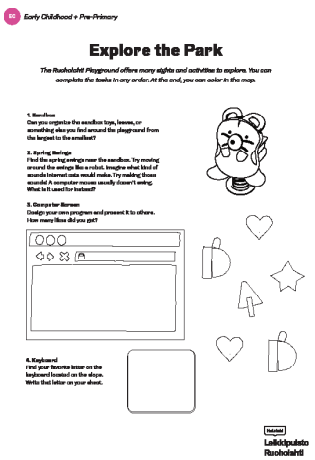
Full curriculum in English can be found on linda-liukas.com/play-ground

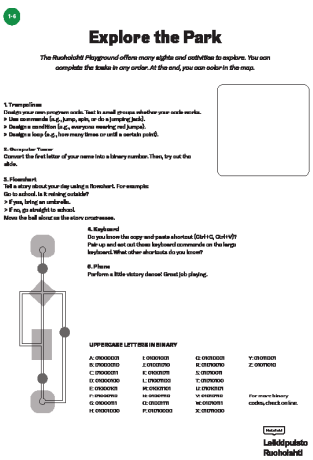
Picture by: Sakari Röyskö / Helsinki

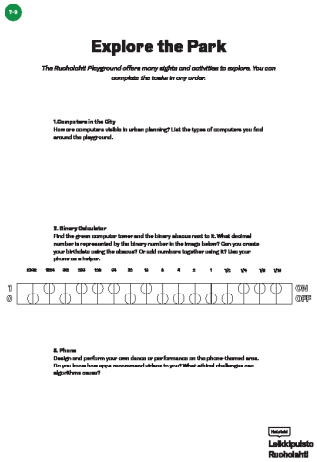
Binary drums and abacus model place value in base 2, while trampolines and key-steps support if–then rules and movement sequences—letting pupils act out algo-rithms and number systems before they see them in symbols.



Flowchart hopscotch turns decision trees into a game: each hop follows a yes/no choice, so pupils physically trace branches, test conditions and experience the structure of algorithms and flowcharts before meeting them on paper.







An Educator's Guide, age-banded Explore the Park worksheets, a set of 20+ activity cards, maps and simple posters/QR signs that tie each structure to a clear maths or computing idea form the curriculum.

Recognition/media

"When the children are happy, everyone benefits."

Monocle

Fast Company Innovation by Design 2025. Urban Design, Honorable Mention

FastCompany

"The world's first coding playground."

BBC

"Brilliantly bizarre!"

Wallpaper*

"Helsinki dared to build a playground that isn't only about safety."

Helsingin Sanomat