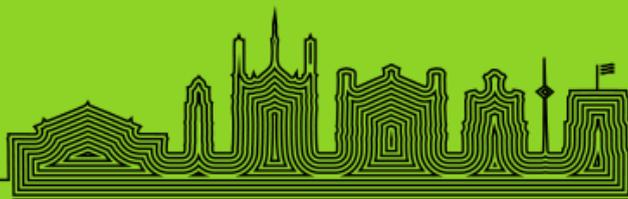




Constructionism 2018

Constructionism, computational thinking
and educational innovation

Vilnius, Lithuania, August 21 to 25



Arnan Sipitakiat

Learning Inventions Laboratory
Chiang Mai University
Thailand

Arnan (Roger) Sipitakiat is a faculty member at the Computer Engineering Department in Chiang Mai University in Thailand. He directs the Learning Inventions Laboratory (LIL). He received his Ph.D. from the Future of Learning Group at the MIT Media Laboratory, USA in 2007. Arnan's passion that was started at MIT is to design technologically-rich learning environments that could open up new ways for secondary and pre-college students to experience and learn about new ideas. He has explored areas including robotics, interactive art, games, agriculture, environmental awareness, journalism, and community development.

As the founder and director of the Learning Inventions Laboratory, Arnan directs his students to work on both academic research and learning innovation initiatives. For example, Arnan and his collaborators at Stanford University have designed the **GoGo Board**, a low-cost robotics toolkit that exposes learners to ideas in sensing and control. To put the GoGo Board into real use, Arnan conducts the iTim (Interactive Technologies for the Inventive Minds) learning program that allows students in about ten schools to use the GoGo Board to pursue personally meaningful projects.

Arnan also works hard to put research work out in the market. Arnan teaches the Innovation to Market course to students who are interested in startups. Arnan operates his laboratory as a public makerspace. Arnan has licensed a number of his inventions to private companies. His research work on RoboBlocks, a tangible programming environment for children, has led him to become part of the design team for **Google's Bloks project**.

Arnan has worked with the Suksaphattana Foundation to introduce educational development programs in Thailand's schools, rural communities, and industries since 1997. He coordinated the launch of the One Laptop per Child (OLPC) project in Thailand in 2008. He spearheaded the Candlelight Project, an ongoing collaboration with Stanford University. Arnan has chaired a number of national and international conferences, such as **Constructionism 2016**.