Self-playing labyrinth game using machine learning and artificial intelligence

KITs is an IT consulting company based in Gothenburg. We are a mix of talents and experts. Our experts are the best consultants in their respective engineering / business areas and our talents are on the way to becoming experts. We focus heavily on competence development within our technology and business areas. We work methodically and purposefully to constantly develop KITs into a better company with open mind and relaxed atmosphere. KITs was founded in 2013 and consists of 35 employees.

KITs has built hardware and software into a classic Brio Labyrinth game. It is controlled using Nintendo controllers and servomotors, as well as calculating points and time using video analysis.

We designed the solution for a contest where the goal was to get as far as possible on the track in the shortest time. Now we are wondering about machine learning and AI can make it even better and faster.

**Task**

Being able to navigate a bullet through the maze from start to finish without human intervention.
Goal
Create an algorithm based on machine learning and artificial intelligence capable of navigating bullets through various mazes that accompany Brio's maze game.

Steps
Analysis: Identify appropriate machine learning algorithms and select appropriate candidates for tests.

Test data: Collection and normalization of data to suit machine learning algorithms.

Testing: Perform a number of tests to learn the chosen machine learning algorithms and proceed with the most promising.

Implementation: Design and implement the most promising algorithm so that bullets are navigated from start to finish in the maze without human intervention.

Profiles
We welcome applications from student groups (2 students) with good theoretical knowledge of machine learning, artificial intelligence, deep learning and programming skills.

To Apply
Send application to jobb@kits.se

Questions
Contact Hoi-Man på 0738-131813 eller hoi-man.lui@kits.se

About KITS
http://www.kits.se