



CERTIFICATE OF ACHIEVEMENT

BADGE KIT COMPLETION

This certifies that

Your Name

has completed every step of the badge kit

Program a maze-solving robot

Girl Scouts Ambassador: Programming Robots

Stephen Souders

MYTEK LAB



October 30, 2026

DATE COMPLETED

SCOUT

Your Name

BADGE

Girl Scouts Ambassador: Programming Robots

Each step below was done with the kit **Program a maze-solving robot**, finished October 30, 2026.

- ✓ Step 1: Learn about robots
- ✓ Step 2: Build a robot model: motorized robot
- ✓ Step 3: Explore the way robotics systems work together
- ✓ Step 4: Learn about programming
- ✓ Step 5: Write a program for a robot

SAMPLE

For the troop leader

The troop awards the badge. Sign here when the scout has shown you the work.

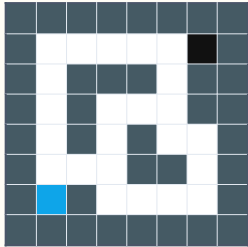
LEADER SIGNATURE

DATE AWARDED

MY WORK

Your Name: Program a maze-solving robot

MY MAZE



Start Goal Wall

Step 1. My three coin-stacking times:	(what the scout wrote)
Step 1. What a robot would do better, and what I did better:	(what the scout wrote)
Step 2. What I changed, and why:	(what the scout wrote)
Step 2. Which settings would make it faster, and which would make it turn tighter:	(what the scout wrote)
Step 3. One decision as input, controller, output:	(what the scout wrote)
Step 4. My pseudocode:	(what the scout wrote)
Step 4. Moves by the right-hand rule, and moves on the shortest path:	(what the scout wrote)
Step 5. How many dead ends the robot backed out of:	(what the scout wrote)
Step 5. Why the right-hand rule finds the goal in any maze whose walls connect to the outside:	(what the scout wrote)