

CWSF 2015 - Fredericton, New Brunswick



Zane Frantzen

Perfect Toast: Using Microcontroller Technology

Challenge: Innovation

Category: Intermediate

Region: Simcoe County

City: thornbury, ON

School: Pretty River Academy

Abstract: Using Microcontroller technology, this project aimed to create a device allowing any toaster to produce either light-, golden-, or dark-coloured toast consistently using different types of bread. Using this device the owner could continue using their old toaster and not replace it even if the manufacturer's control knobs failed. This would reduce environmental waste, thereby lowering the users environmental footprint.

Biography

My name is Zane Frantzen. I am in grade 9 at Pretty River Academy in Collingwood, Ontario. After graduating high school, I would like to go to university for Computer Software Engineering. My hobbies include programming apps, creating websites, and playing sports. My favorite sports are skiing, soccer, golf, swimming, and tennis. This is my first time at Canada Wide Science Fair, and I'm excited! I got the inspiration for my project over a couple of days when I was toasting bread. One morning it turned out too burnt, and undercooked the next. I found this was due to the unreliability of the control dials on the toaster. I eat toast on a regular basis and this was a recurring problem I ran into. My next step for my project would be to make it commercially available. To do this I would first have to create packaging to enclose all the parts of the device. If I were to advise other students thinking about doing a project, I would tell them to pick a topic that interests them. It will make their project a lot more enjoyable.

Awards

Value

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| Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada | |
| Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University | \$1 000 |
| Total | \$1 000 |