

# High-Tech Event - Electronics/Smart Technology



*May 29, 2019*

In November 2018, the Cincinnati area Royal Rangers held their annual High-Tech event. The theme for the 2018 event was Electronics/Smart Technology and involved teaching our Royal Rangers some of the concepts of electronics.

We try to match our speaker with the theme of the event or have the speaker give a devotion on the theme. This year the guest speaker was Adam Losekamp. He is a media evangelist with Words of Life Evangelism, which is devoted to teaching and preaching the gospel, to reaching the lost, and to growing God's kingdom through blogs, video blogs, and social media.

The Ranger Kids and Discovery Rangers focused their attention on building several electronic projects using the Elenco Snap Circuits® SC-300 kit. The Snap Circuits® kits featured more than 60 parts that easily snap together, so no tools were required. The Snap Circuits® kits were used to make interesting circuits that encouraged educational play and taught the boys about electricity. All the parts have colored graphics that represent their real electronic names and symbols to get the boys ready for the real thing when they are older. The

competition involved building several projects available in the kit, such as circuits for doorbells, radios, alarms, flashing lights, laser lights, streetlamps, lie detectors, and fan modulators. The boys had a specified amount of time during the event to complete as many projects as possible.

The Adventure Rangers, Expedition Rangers, and some parents and leaders were tasked to build cars from the UCTRONICS® IR Smart Robot Car Kit for Arduino. This was a most challenging event because it involved constructing the smart car and making it operate autonomously with the kit's default program. The competitors were also given an additional set of programs that permitted the smart cars to move in a straight line, turn left/right in degrees, move for a specified distance, and move at various speeds. The base versions of the programs were given to the competitors to load to the smart cars, but to make things more challenging, they had to "tweak" the programs to make their cars perform for the competition. There were several obstacles that were used in the competition to test out their "tweaked" programs.

The top competitors from each group were awarded electronic projects that they could build at home. As part of the registration for the event, each boy took home either the Snap Circuits® kit or UCTRONICS® Smart Robot Car Kit that he used during the competition.

If you have any questions about how to organize a high-tech event using electronics or smart technology in your outpost, section, or district, please feel free to contact me at [japke@fuse.net](mailto:japke@fuse.net).

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Royal Rangers Leaders