CNT ROBOTICS NEWSLETTER

November 2017

First, a big Thank You for visiting my booth at the Mini Maker Fair at Barnes & Noble (Great Mall of Georgia) last weekend (Nov. 11-12, 2017).   For me, it is always gratifying to see the sparkles of interest in the kids' eyes.

If you are a newcomer to ROBOTIS systems, you may be overwhelmed by their many and different robot series available, thus I made a YouTube [video](#) to help ease this task. Essentially, you'll need to consider the user's current robot construction skills and available budget.

I am working with the UGA Georgia Center to provide weekend short courses and summer camps for students, recommended for 11 years old and up:

> The weekend series have 2 offerings ([WRE](#) and [MMR](#)) which use the PLAY 700 kit. "WRE" needs to be taken before "MMR" and you can register for the Spring 2018 courses [here](#). If you have younger but more advanced students in the areas of Coding and Robotics, please email me roboteer@comcast.net for further discussions.
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> The Summer camps will be offered in June and July 2018, but the registration materials are not yet ready. You can browse through the old Summer 2017 materials [here](#). This camp will be using the DREAM kits.

I know that Athens may be too far for some families, so I am working on finding some avenues in the North Gwinnett areas. If you can help me with this task, please drop me an email at roboteer@comcast.net.

For younger students (5-10 years old), unfortunately I have not prepared much instructional materials for this age group, currently.   But I would

recommend that parents investigate these robot kits and coding resources, popular in schools (that I know of, and I am sure that I have missed quite a few):

1. The Bee-Bot (https://www.bee-bot.us/) for the very young ones.
2. KIBO (http://kinderlabrobotics.com/kibo/) (4-7 years old). Related to this robot kit are the software tool SCRATCH Jr (https://www.scratchjr.org/) and the book by Drs. Marina Umaschi Bers and Mitchel Resnick (https://www.amazon.com/Official-ScratchJr-Book-Help-Learn/dp/1593276710). Students would actually use "wooden blocks" to program the robots. Plenty of instructional materials at their web site.
3. CUBELETS (https://www.modrobotics.com/) (4+ years old). In my opinion, this modular robot design is most innovative as the "software" is inside the "hardware". Some years back, I made a YouTube video for a "first look" at the Cubelets system. Also, plenty of instructional materials at their web site. They also offer the MOSS system, but parents would have to watch out for the little spherical magnets if ones have toddlers at home.
4. OZOBOTS (https://ozobot.com/) have "lots of personality" and are comparable in pricing to the PLAY 700 kit and "easier to start".
5. For software-only trainings, you'll need to investigate:
   a. SCRATCH 2 — the older sibling of SCRATCH Jr. (https://scratch.mit.edu/).
   b. GOOGLE BLOCKLY works on iOS and Android devices, as well through web browsers (https://developers.google.com/blockly/). Many robotics systems have adopted this software interface such as OZO, PARALLAX, WONDER WORKSHOP, SCRATCH BLOCKS.
   c. APPLE SWIFT PLAYGROUNDS (currently works on iPads only) (https://www.apple.com/swift/playgrounds/). Many other robotics systems use this software interface for robot control

(https://www.apple.com/shop/accessories/all-accessories/toys-games) such as SPHERO, DASH, JIMU, littleBits.

SO MANY CHOICES for training the next generation of ROBOTEERS!