**General Information**

- Online enrollment begins 6 pm, Oct. 24, 2016
- 450 children will be accepted into the program
- Participants accepted will represent a geographically diverse area
- For enrollment information, please visit [http://kidstechniversity.vbi.vt.edu/](http://kidstechniversity.vbi.vt.edu/)
- Registration is on a “first-come, first-served” basis that is open to children satisfying the age restriction, regardless of place of residence or academic achievements. A waiting list will be available after registration is full for a county or for the program.
- In order to keep up with the costs of providing a quality program, there will be a registration fee of $100.00 per child, payable upon registration (no refunds). Scholarships are available. Lunch cards and a KTU t-shirt will be given to all children who attend.
JANUARY 21, 2017
Dr. Sallie Keller, Virginia Tech
“What will your community be like in 25 years?”

When you wake up, say, 25 years from now, what will you do? What will your community be like? More importantly, 25 years from now, what do you want to wake up to?

Vast amounts of data, generated through almost every aspect of living, offer an unprecedented opportunity to health and well-being in our communities. Communities are the places where we live, learn, work, and play, where the elements of our social existence – the individuals, families, organizations, and neighborhoods – interact as we seek to achieve our individual and group shared values and goals. Every day we leave digital traces just through living - these traces capture use of government services, distances to grocery stores and health care providers, transportation networks, and other data important to creating healthy, vibrant, and safe communities. Advances in computational and statistical methods allow researchers to use these data to capture the flows of people and their activities in a community leading to a better understanding of quality of life and services while accelerating community efficiency and resiliency.

FEBRUARY 18, 2017
Thomas (Tweeks) Weeks, Rackspace
“How Kids Can Take Over The World (or at least gain more control over it), using the Arduino”

Arduinos are very similar to the little electronic brains in your parent’s dish washers, microwave ovens, and car dash boards. They’re super easy to program and control to do really cool & fun stuff! Like most microcontrollers, the Arduino brain we’re going to be looking at reads real world inputs like light sensors, sound & temperature probes, motion sensors and buttons.. and allows you to DO and change things in the physical world. You can control speakers, buzzers, lights, alarms, LCD displays and motors (like with robots).. or even send text messages or emails to your phone! What do YOU want to control in the real world? Come to this way cool lecture and find out how! :)

MARCH 18, 2017
Dr. Mike Bowers, Virginia Tech
“How can animal communication help us understand language?”

Animals communicate in a variety of ways. These communication signals can include vocal growls from a lion or the wiggle of the tail from a dog. In fact, some animals communicate using sounds humans are not able to hear. We humans share with animals this capacity to communicate, but little is known about how the brain learns and uses language. The lecture will describe how investigating the communication systems and the brains of animals can help us to better understand neurodevelopmental disorders such as autism that have communication impairments.

APRIL 01, 2017
Dr. Zachary Mackey, Virginia Tech
“Are there better ways to cure those weird parasitic diseases?”

Parasites are organisms that survive by obtaining its nutrients form the host. Some parasites cause weird or nasty diseases that are difficult or sometimes even impossible to cure. In some cases, the drugs that are used to treat these parasites are even more unusual than the diseases caused by the parasite. Why is that? The answer to that question is complex, but mostly can be attributed to the fact that some of the drugs used to for treatment in parasitic diseases were developed nearly a century ago. My talk will cover strategies of developing new drugs to treat parasitic diseases. I will also talk about different strategies for discovering genes in parasites that can be targeted to cure some of the parasites that cause serious diseases.

Please note: Students enrolled in the VT KTU program are enrolled for all of the KTU events that are found on this flyer.

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