

# **Educating Rural America in Cyber Security**

**Dr. Bhavani Thuraisingham  
The University of Texas at Dallas**

**Introduction to the Panel**

**November 2018**

# Need to Reinvent

- There are vast number of men and women who are blessed with skills, such as factory assembly like line production, we no longer need or will not need in the next 20 years.
- "Robots" or robotic like devices will take over many of today's jobs.
- Look at farming, at manufacturing, They were great jobs in their time but the numbers of folks needed are no longer needed today.
- Being great requires continually reinventing; And nowhere is it done better than the US.
- But the emphasis needs to be on a culture of continued change and continued reinventing.

# The American Dream

- However, in this process of acquiring talent from the outside, the questions are, are we neglecting talent from the inside?
- There are so many boys a girl in Rural America who are not living the American dream that many foreigners are living because they don't have the opportunities for being truly educated.
- I am so thankful that we have foreign students who like me have found the American Dream.
- Some of my colleagues have said "people in Rural America don't want to learn computer science, they want their manufacturing jobs back".

# Lesson from the British Empire?

- Remember when the British conquered the world, many countries were not literate.
- They changed the education system of much of the world and now many countries have highly educated people.
- We as professors have to do more to recruit more US citizen students in cyber security.
- We have to reach out to rural students and educate them in cyber security which will produce great jobs for them.

# What Can We Do?

- There is tremendous progress now with coding camps and other special programs.
- But we have to make sure that these programs are being offered to students in Rural America.
- The key to getting students educated is to get the teachers educated.
- We have to start first by training the teachers in rural schools so that they can then educate their students.
- We also have to take advantage of on-line education programs to educate these teachers.

# Focus of the Panel

- **The panel will explore the challenges we are faced with today in educating rural America in cyber security and discusses some potential solution.**
- **We will focus on different segments; Men, Women, and Minority Groups who are US Citizens**
- **How can we reach out to the different groups?**
- **What cyber security topics should we teach?**
- **How do they get the background in Computer Science that they need to specialize in Cyber Security?**

# Panelists

- **Dr. John Springer, Professor of Cyber Security and Information Technology, Purdue University**
- **Dr. Janell Straach, Director for Engaging Women in Cyber Security and Chair of the Board for WiCyS**
- **Dr. SS Iyengar, Distinguished Professor and Director, Computer Science, Florida International University**