

Engineering and Science Can Be/Is Exciting and Fun.....Really.

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Network Engineering Manager
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Introduction Of Your Speaker

1. Life long Baltimorean
2. Graduate of Baltimore Polytechnic Institute-Class of 1988
3. Bachelors of Science Electrical/Computer Engineering Degree – Morgan State University(MSU), 1999
4. Masters of Science, Telecommunications Management – Stevens Institute of Technology, 2003
5. Coordinated middle/high school STEM programs from 1996-1999 for the MSU School of Engineering
6. Worked thru a National Science Foundation grant and collaborated with five(5) top institutions of higher learning for STEM programs
7. Developed the Saturday Academy to expose students to careers in engineering through hands on projects.
8. Algebra I teacher from 1999-2000 Baltimore City Public Schools
9. Engineering Manager at Verizon Communications

What I think Young People Care About?

Social Circles

Popularity

Clothing

Athletics

Football(for example)

- 300+ Division 1A Schools in the United States x 53 players = 15, 900 active players
- NFL Draft = 7 rounds *32 teams every year = 224 players chosen
- On average 10-15 spaces available every year per team.

Communication

- Texting
- Applications
- Internet Access
- Talking(NOT)

I Dislike/Hate Science and Math

Why Is This?

No Excitement, Perceived

Relate to daily Life

What is cool about it

Why Do I Want to Know This?

Understanding of the world and how STEM plays a role

How will this help me get a job

Job is Short Term/Career is Long

Vision

The Landline

The Dinosaur



Engineering Fun moving from 1980(Time Division Multiplexing) to 2010(IP Platform)

Switch Installed in 1980



The Baltimore 1AESS switch consumed more than 6,500 square feet of space and was equipped for 35,052 lines

Replaced in 2010



The Baltimore IP switch consumes nearly approximately 30 square feet of space and was equipped for 35,052 lines

The Future of Communications. What Does It Look Like?

Verizon 4G LTE Devices

Cell Phones

Smart Phones



Basic Phones



Internet Devices

Tablets



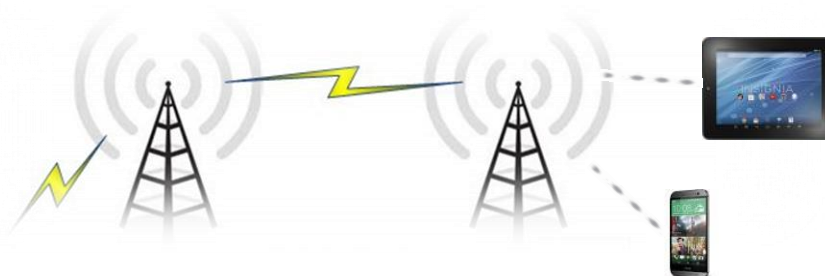
USB Modems



Connected Devices



What is Mobile Technology?



Mobile Technology

Mobile technology is the technology used for cellular communication. This technology allows small businesses and residential users to setup simple to advanced mobile solutions in a short time at a reasonable cost.

4G LTE

4G, short for fourth generation, is the fourth generation of [mobile telecommunications](#) technology, succeeding [3G](#) and preceding [5G](#). A 4G system, in addition to the usual voice and other services of 3G, provides mobile broadband Internet access, for example to laptops with [wireless modems](#), to [smartphones](#), and to other mobile devices.

Yesterdays Storage

Hard Drive/Flash Drive



Cloud technology:

Google



- Gmail
- Google Calendar
- Gmail Contacts
- Google Drive
- Google Voice
- Picasa Web Albums
 - YouTube
 - Google+

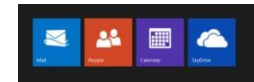
iCloud



iCloud

- Email
- Calendars
- Contacts
- Documents and data
- Photo Stream
- Reminders

Microsoft Cloud



- Windows Live
- Outlook.com
- Calendars
- Contacts
- SkyDrive
- Office 365

What's Next? Somewhere To Start

Physics

Kinetic and Potential Energy

Disc Jockey

Automobile

Track and Field

Turn Computer On

Biology

Marine Biology

Research to improve the world

What % of the world is H₂O?

Chemistry

Medicine

Automobile(Gas. Alternative Fuels)

Military

Pharmacist

Anatomy

Nursing

Medical Doctor

VZ App Challenge-Engage Your Kids Now

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How To Enter | Inspiration | Resources | Press Room | Voting

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Best in Nation team

How to Enter
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IDEA
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Thank you.