

# Competitions and Community



# Brevard Science Fair



- “Computer” category
- “Computer Science” category at the state level
  
- **Intel International Science and Engineering Fair**
  - 2012: one of the two runners-up was from the CS category
  - <http://www.intel.com/about/corporateresponsibility/education/isef/winners.htm>
  - Improve the function of Internet search engines, allowing them to perform “micro-searches”

# USA Computing Olympiad



- [www.usaco.org](http://www.usaco.org)
- 6 web-based contests during academic year, free!
- 3 divisions (bronze-beginner, silver-intermediate, gold-advanced)
- US Open in late spring
- 4 students represent the US in International Olympiad in Informatics

# FIRST Robotics



- [www.usfirst.org](http://www.usfirst.org)
- **FIRST Tech Challenge**
  - “Teams of up to 10 students are responsible for designing, building, and programming their robots to compete on a 12 X 12’ field in an Alliance format against other teams.
  - Robots are built using a TETRIX® platform that is reusable from year-to-year using a variety of languages.”
- **FIRST Robotics Competition**
  - “teams of 25 students or more are challenged to raise funds, design a team “brand,” hone teamwork skills, and build and program a robot to perform prescribed tasks against a field of competitors”

# Imagine Cup (Microsoft)



- [www.imaginecup.com](http://www.imaginecup.com)
- 16 or older (in high school or college) in teams
- Multiple Competitions
  - Software Design
  - Game Design
  - IT Challenge
  - ...
- Each year has a theme
  - Past few years: UN Millennium Development Goals
- Annual cycle starts in July
  - Multiple Rounds
  - Worldwide finals in July

# Computer Science Teacher Association



- **CSTA**
  - [csta.acm.org](http://csta.acm.org)
  - chapters across the country
  - “supports and promotes the teaching of computer science and other computing disciplines.”
  - “provides opportunities for K-12 teachers and students to better understand the computing disciplines and to more successfully prepare themselves to teach and learn”
- **Curriculum**
- **Professional Development**

# Outreach Activities (Florida Tech)



- **Fall**
  - Help Mentor Science Fair projects
  - LASER Day
- **Spring (January)**
  - Community lecture
- **Spring (February-March)**
  - Visiting high schools
  - Visiting Florida Tech
- **Summer (July)**
  - Summer camps
  - Teacher workshop [this workshop]

# Computer Science Education Act



- **HR 3014**
  - ✦ Congressman Polis (Colorado)
  - ✦ <http://www.youtube.com/watch?v=063JN4h06el>
    - (start at 1-minute mark)



# Questions?

