



## Menchville Robotics Team FIRST Fast Facts



- *FIRST* is an acronym that means 'For Inspiration and Recognition of Science and Technology'
- *FIRST* was founded by inventor Dean Kamen in 1989
- *FIRST* runs four robotics competitions geared towards different student age ranges
  - Junior *FIRST* Lego League (JFLL) for 1<sup>st</sup> through 4<sup>th</sup> grades
  - *FIRST* Lego League (FLL) for 4<sup>th</sup> through 9<sup>th</sup> grades
  - *FIRST* Tech Challenge (FTC) for 8<sup>th</sup> through 12<sup>th</sup> grades
  - *FIRST* Robotics Competition (FRC) for 9<sup>th</sup> through 12<sup>th</sup> grades
- *Triple Helix*, The Menchville Robotics Team was formed during the 2007 – 2008 school year. The team competes in the FIRST Robotics Competition (FRC), and is the only FRC team in Newport News
- *Triple Helix* received the 2008 *Rookie Inspiration Award* and the 2009 *Underwriters' Laboratory Industrial Safety Award* at the NASA/VCU Regional Competition in Richmond, Virginia
- An average FRC robot can weigh as much as 150 lbs and may incorporate dozens of sensors, including vision sensors, to efficiently perform its tasks
- Dean Kamen is best known for being the inventor of the Segway Human Transporter
- The Menchville Robotics team is supported by technical mentors from the Army Research Laboratory, Boeing, Jacobs Engineering, Christopher Newport University, and Menchville High School
- In 2009, over 42,000 high school students from nearly 1,700 teams competed in the FRC
- FRC teams currently represent 48 out of 50 US states and ten foreign countries
- FRC attracted over 23,000 mentors and 6,300 volunteers in 2009
- FRC has been called the "hardest fun ever" and the *FIRST* Championship the "Superbowl of smarts"
- At East Technical High School in Cleveland, Ohio, more students try out for the FRC team than the football and basketball teams combined
- The FRC Kick-Off Event, in which *FIRST* announces the new game for the year, is held each year in January
- In 2009, over \$9.8 million in college scholarships were awarded to students who participated in *FIRST*
- Over 3,000 companies sponsor FRC teams
- The typical budget for an FRC team ranges from \$12,000 to over \$50,000 annually
- In 2009, the *FIRST* Robotics Competition consisted of 40 regional competitions, 7 district competitions, one state championship, and one world championship
- A student who participates in *FIRST* is twice as likely to major in science or engineering and more than three times as likely to major specifically in engineering
- *FIRST* encourages "gracious professionalism" in which students compete hard, but treat each other with great respect
- The computer software and electronic systems supplied to each FRC team by *FIRST* in 2009 had a commercial value of over \$150,000
- FRC teams have only six weeks following the announcement of the new game to design, build, and program their robots
- 344 teams competed for the title of FRC champion in 2009. The event was held on the playing field at the Georgia Dome in Atlanta
- An FRC robot is capable of autonomous or student-operated control
- An FRC competition is a 3-day long event
- FRC teams are encouraged by *FIRST* to engage in community outreach programs
- An FRC team has been awarded \$5 million to develop a robotics exhibit for a children's museum
- The FRC game in 2009 was called *Lunacy*, which commemorated the 40<sup>th</sup> anniversary of the first manned lunar landing on July 20, 1969
- Dean Kamen received the Lemelson-MIT Prize in 2002 for inventing the Independence™ IBOT™ Mobility System – a wheelchair that can stand and climb stairs. He donated the entire \$500,000 prize to *FIRST*

