

# Mark McCombs and FIRST®

## Mapping the Future of STEM

Mark McCombs is changing the way we see STEM and robotics, where failure is not optional and STEM programs are prolific.

"I keep a huge map of Jacksonville with a dot where every school is and how many teams we need to build and sustain in order to hit the goals that make companies want to flock to our city," said Mark McCombs, Founder of Renaissance Jax and TEDx Talk Speaker.

A man inspired by the inventor of the electric car, Elon Musk, McCombs aspires to build the next generation of innovators in his own backyard of Jacksonville, Florida. He is out to change the world and fill it with engineers, scientists, machinists and visionaries – the next generation of technologists shaping our society. McCombs aims to draw companies like Tesla to his home of Jacksonville and get more children involved with STEM.

His passion was first realized during his involvement with *FIRST*®. *FIRST*, in partnership with LEGO® Education, is a non-profit organization aimed at inspiring young people to participate in science and technology. *FIRST*'s programs, like that of *FIRST*® LEGO® League, engage children in playful, meaningful learning, while promoting key skills in science, technology, engineering, and math. Children develop solutions using LEGO® bricks and models, to solve real-world problems and compete in robotics competitions annually. *FIRST*® aims to inspire tomorrow's

innovators through the values of cooperation, problem-solving, critical thinking and play, ultimately preparing students for 21st century careers.

By 2020, 80% of future jobs will require STEM skills. McCombs saw the need to create a talent-generating engine to fill these jobs and impact future generations. In high school, he joined a *FIRST*® Robotics Team (FRC) working in a machine shop. He fell in love with the competition and went on to receive an engineering degree and start clubs using the leadership skills he gained in *FIRST*®. From there, he became a coordinator at the school from which he graduated. The day he was let go from that position, he received the resources to start his own organization to provide the resources for other students to pursue STEM-related careers.

"STEM is important for a ton of reasons," said McCombs, "Mostly having to do with the grit that it instills in kids who actually try." He is familiar with failure and credits those experiences as steps to his current successes. "Every step I learned along the way, I learned in *FIRST*." His advice to future engineers and students in STEM-related fields is, "Make mistakes, build a robot, see what you're made of. Don't back down. Learn to try harder. Invent something. Play. Laugh...Read the Apollo 11 flight plan. Learn about what the things you play with are made of...Get ready to do more with your life than you ever thought possible."



**Mark McCombs:**

Position: Founder of Renaissance Jax and TEDx Talk Speaker  
Location: Jacksonville, FL



As Mark McCombs adds another dot to his map of Jacksonville, he continues to plant the seeds for STEM-related careers and inspiring the innovators of tomorrow.

Learn more about FIRST programs, [firstinspires.org](http://firstinspires.org)

Learn more about LEGO Education, [LEGOeducation.com](http://LEGOeducation.com)

**LEGOeducation.com**



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