



ABOUT QUARKMINE

Quarkmine is a U.S. Congressionally recognized organization and is Northern Michigan's leading expert on building and sustaining a successful robotics program.

Quarkmine founders **Philip Leete** and **John Gilligan** are experts in Science, Technology, Engineering, Arts, and Math (STEAM). They have a unique blend of nearly 20 years of industry experience with 10 years of classroom experience. Competitive STEAM teams they have mentored and instructed have enjoyed a consistently high level of success with many teams moving on to state and world level competition.

Quarkmine's efforts to work with legislators in Lansing have resulted in over \$20 million dollars of additional funding for STEAM programs in Michigan, and their services have helped Northern Michigan schools receive over \$1 million in total funding.

PHILIP LEETE



Philip holds degrees in mechanical engineering, secondary education, mathematics, and dance choreography. Early in his career, he toured the country professionally as a performing artist while developing dance residency programs for school districts in Michigan. Eventually turning to education full time, he has 10 years of experience teaching Math, robotics, CAD, chemistry, dance, and theater at the high school level and created one of the largest self-contained, multi-district robotics programs in Northern Michigan. This highly effective teacher led multiple robotics teams to state and world competitions before forming Quarkmine. Since 2015, he has served as event director for many of Northern Michigan's competitive events, including the largest Elementary and Middle School level State Championship to date in Michigan. Philip's approach to engaging students combines a unique technical and artistic approach with a very high level of passion and classroom management skills.

JOHN GILLIGAN



John is an IT professional and entrepreneur with over 20 years of industry experience. His passion for student preparation for the future and belief that any student can succeed with the right tools led to founding Quarkmine. Programming since the age of six, he holds a degree in Management Information Systems (MIS). John spent his early career in IT management, database administration, and programming before founding two small businesses. He is one of Michigan's most successful robotics mentors, having worked with over 25 FIRST and VEX robotics teams. The teams he has mentored have won over 100 awards at the local, state, and world level, including back-to-back World Championship design wins and five world championship finals appearances. John was previously responsible for competitive robotics for the entire state of Michigan and taught competitive robotics across the country to teachers and students. John has been the driving force on several game design committees where he has created challenges in which students around the world have competed.