

Research at the AMT

Welcome to the AMT – your reliable partner in research, development, and innovation for the autonomous and green mine of the future!

Our Institute is dedicated to the research, development and innovation of novel technologies along the entire data-information-value chain. In an industry characterized by harsh and challenging conditions, we focus on developing ruggedized sensor technologies that enable high-quality data acquisition and data communication. Additionally, we employ advanced data analytics methods and algorithms to transform data into useful information for various mining applications.

Our research fields include

- Asset Monitoring and Diagnosis
- Mine Design and Energy Management
- Mine Communication
- Material Characterization
- Localization, Autonomous Navigation and Robotics
- Environmental Perception.

With a well-equipped and experienced mechanical and electrical workshop, modern IT infrastructure, state-of-the-art lab and sensor testing facilities, and a unique exploratory sandbox in a real mining environment, the AMT provides the ideal setting to develop and translate theoretical and small-scale developments into practical applications.

True to our motto, "AMT: Achieving More Together," the success of the AMT is built on our diverse and outstanding team. With great commitment, interdisciplinary skills, and a passion for our common goals, we are dedicated to shaping the future of mining in a sustainable and innovative way.

Join us in exploring the possibilities of autonomous and environmentally friendly mining technologies!

Details about our research areas you can find [here](#)!



