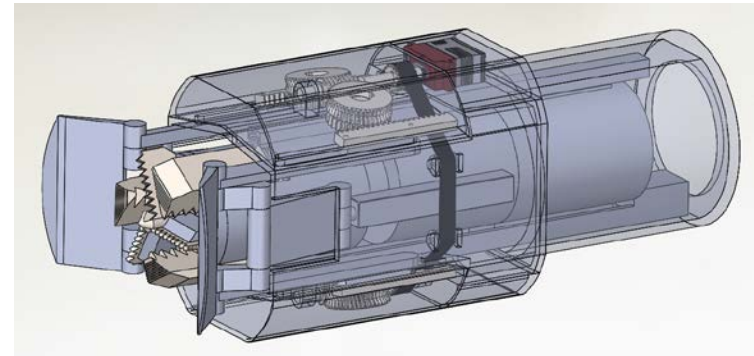


Concept Design for Mole-Like Excavate Robot and Its Localization Method

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- A combination of drill-bit and linkage mechanism are utilized to represent function of burrowing animal's teeth and forelimbs.
- A novel mechanism, which allows both rotating and expanding the drill-bit with one actuator
- The localization system has been proposed that utilized wheel odometry and the magnetic sensor



Overall design of the excavation module