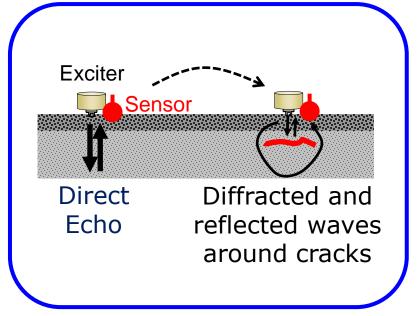
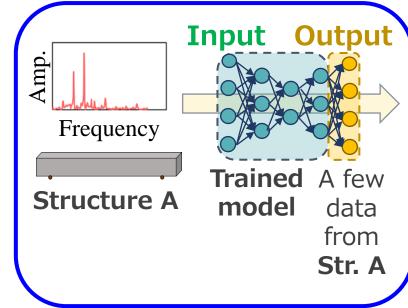


**Autonomous robots** 



Non-destructive inspection



Anomaly detection with machine learning

It is needed to detect internal cracks/damages within civil structures (e.g. roads, railways, ports and airfields) for sustainable societies. In this class, students learn STEM robots, non-destructive testing for concrete structures, and anomaly detection using machine learning. Moreover, students create autonomous inspection robots, those are like self-driving cars and house cleaning robots.