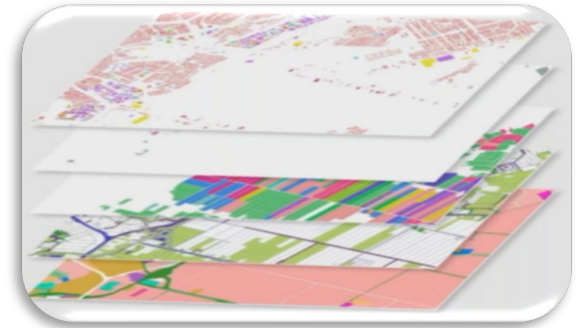
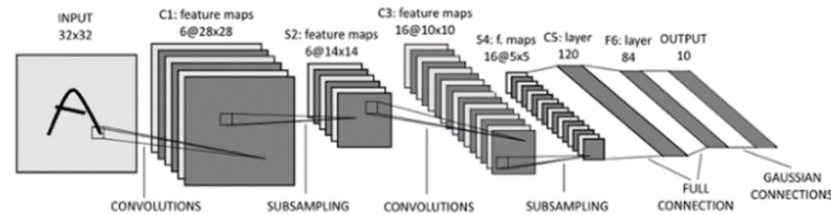


Machine Learning and Remote Sensing Aided Characterization of Built Environment Stocks for Urban Sustainability

KUN SUN



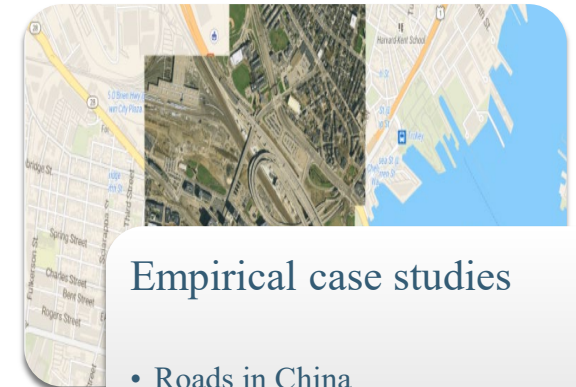
Data Collection

- Geographic Information System
- Remote sensing
- Numerical data
- Metabolic process



Method Innovations

- Building typology
- Auto/identification of building materials/ height
- Aggregating information in 3D city



Empirical case studies

- Roads in China
- Built Environment Stocks in Denmark
- Upscale to Europe/ world