

Anthony Sutton – MRes in Spatial Data Science and Visualisation
CASA, Bartlet, UCL - Dissertation 2018

New Horizons: Exploring London New Build Typology with Convolutional Neural Networks

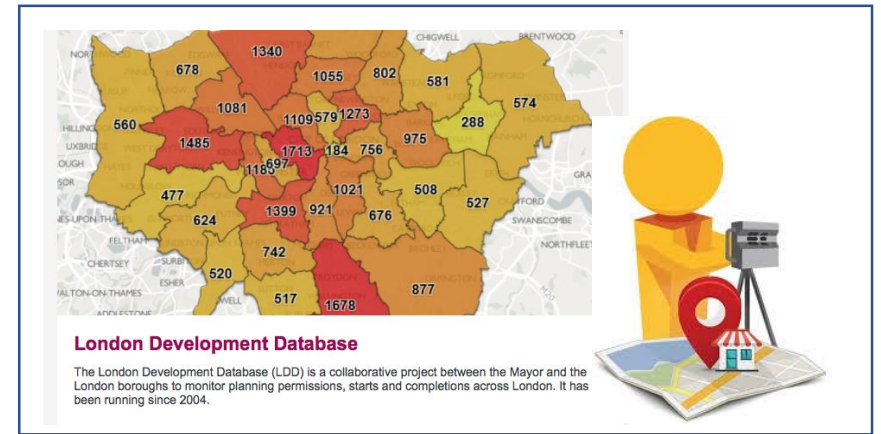
Aim

- Visual Exploration of New London
- Typological Analysis of London New Build
- CNN Image Classification Task on GLAs London Development Database
- Explore a Real-World Machine Learning Analysis Workflow



Method

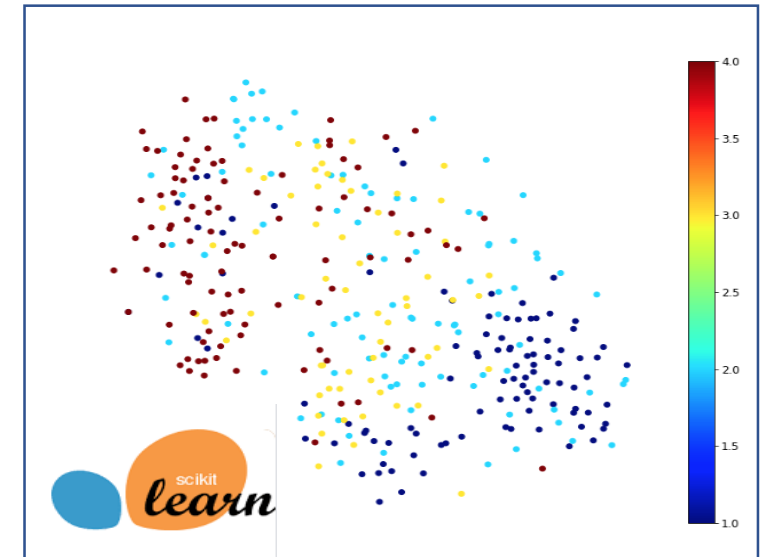
- Data Model: London Development Database & Google Street View



- CNN Transfer Learning with



- TSNE Sci Kit Learn Image Similar Analysis





Lessons Learned & Future Steps

- Cognitive Science: Elegant AI vs Hybrid ML
- Potential Applications: ML Assisted Mapping, Real Time Aggregate Data Solutions for Urban Design & Property Mgmt Problems
- Urban Visual Grammar and Gibson's Ecological Approach

