Design, implementation and evaluation of data integration methods for biomedical cancer data

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Master
Computer Science

Master thesis
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2015-2016

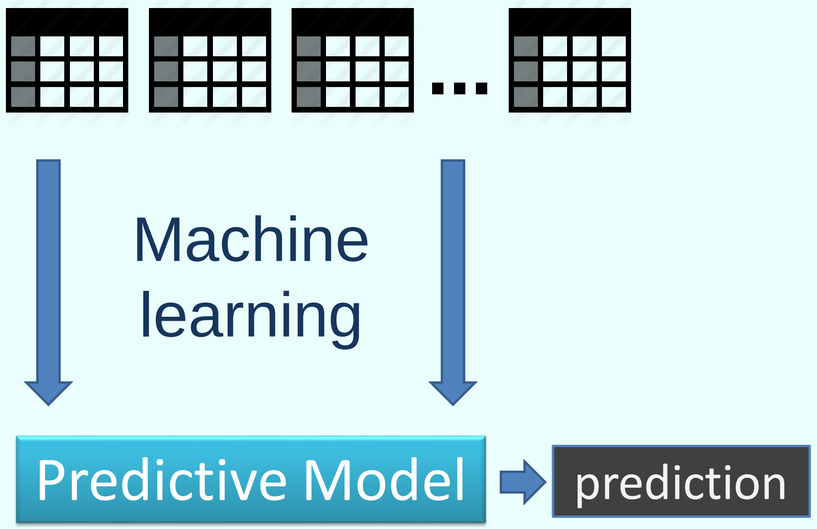
Background

Ever increasing datasets due to:

- Cheaper DNA sequencing
- High-resolution imaging (MRI, PET,…)
- Globalisation of research

Challenge

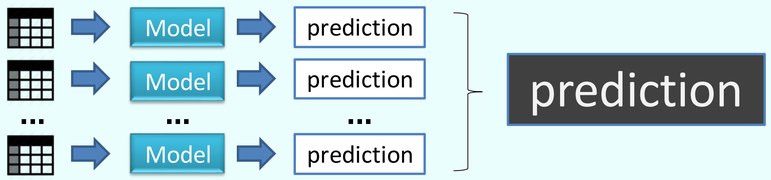
Integrating datasets into a predictive model



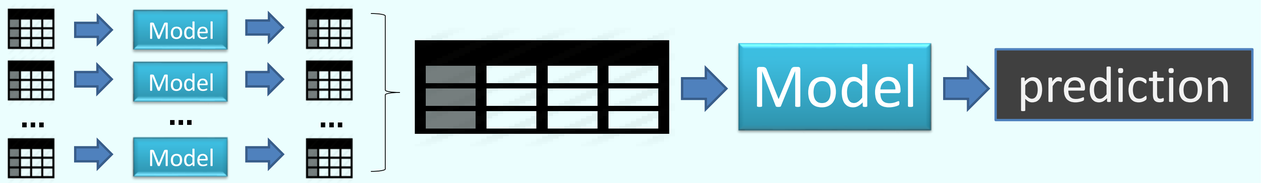
Integration strategies

Early integration

Late integration



Intermediate integration



Results

Case study 1		Case study 2	
Integration	**AUC**	**Integration**	**p-value**
None	0.75	None	0.22
Early	0.82	Early	0.12
Late	0.78	Late	0.16
Intermediate	**0.83**	**Intermediate**	**0.05**