Using a new deep learning technology, developed by members of our founding team at the University of Cambridge, we analyse big, fragmented datasets, with a small number of well characterised records; typically created empirically at significant expense. Our new algorithm can extract an unprecedented amount of information, from datasets which are as little as 0.01% complete, inferring high value information that would be prohibitively expensive to obtain by observational, empirical or experimental techniques.

**Drug Discovery**

Creation of a neural network to run over a protein activity data set of 6,000 proteins and 2,000,000 compounds, 99.5% of the values for protein activity were missing. We completed 20% of the matrix. A typical pair-correlation Bayes approach was only able to fill 0.5% of additional data, we performed a 4-fold cross-validation test. The data set was split in four, and then each quarter is withheld for validation.

**Materials Design**

We used our technology on a database containing 10,000 materials based on experimental data. Exploring a 30 dimensional composition and heat treatment space, our software tool proposed four new alloys.

**INTELLEGENS IS A SPIN-OUT OF THE UNIVERSITY OF CAMBRIDGE WITH THE SUPPORT OF LOCAL BUSINESS ANGELS. INTELLEGENS IS DEVELOPING ITS PROPRIETARY TECHNOLOGY INTO A GENERIC TOOLSET THAT CAN BE APPLIED TO SPARSE, HIGH VALUE, BIG DATA PROBLEMS ON A COMMERCIAL CONSULTANCY BASIS.**