Intellegens

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Training deep neural networks on fragmented data

A new deep neural network technology that

Reduces product development costs

Accelerates a product to market

Generic with proven applications in materials and drug discovery

Raising funds to develop commercial product

What is a neural network: first train

Neural network

Neural network

What is a neural network: then predict

Neural network

Neural network

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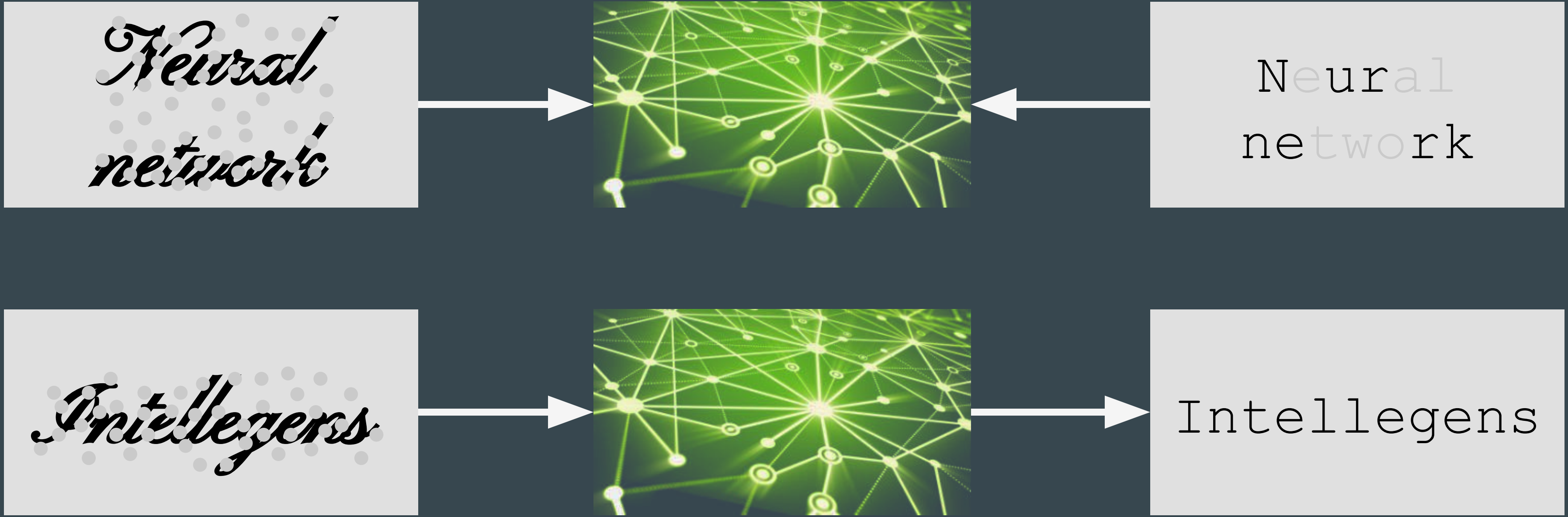
Our unique neural network: train on fragmented data

Our unique neural network: predict on fragmented data

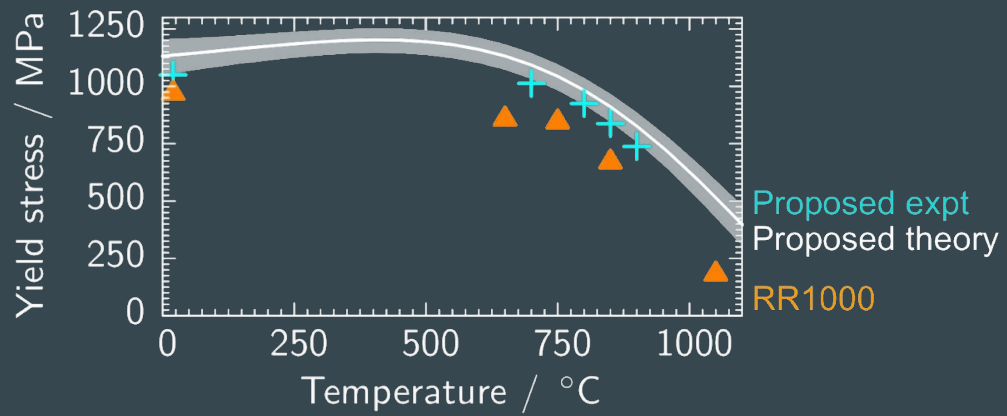


Case study: alloy design with Rolls Royce

Experimental and simulation data on 10,000 alloys

95% fragmented

Designed four alloys, experimentally verified, and patented



Case study: drug discovery with e-therapeutics

Data for activity of 6000 proteins with 2,000,000 compounds

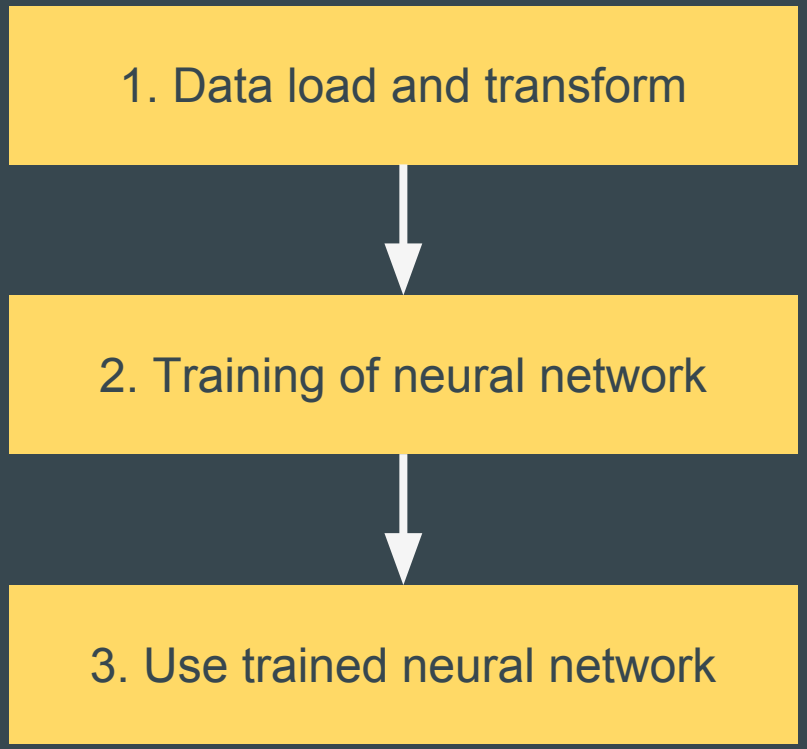
Data only 0.05% complete

Tool completed 20% of the matrix, client's attempt had 0.5% completion

Gives 400x the potential to discover new drugs

Second phase of project underway, active discussions on future work

Productize through web-based platform



Software considerations

Amazon (AWS)
Ruby / Python
Postgres / No-SQL
Web UI / REST API
User accounts / data security
Containerized
Online payments
Demo / screenshots

Summary

Apply deep learning to high-value fragmented data

Cut costs by reducing need for expensive experiments

Proven sales in materials and drug discovery

Generic applications in materials, pharma, health, retail, finance

Seek investment to develop commercial product