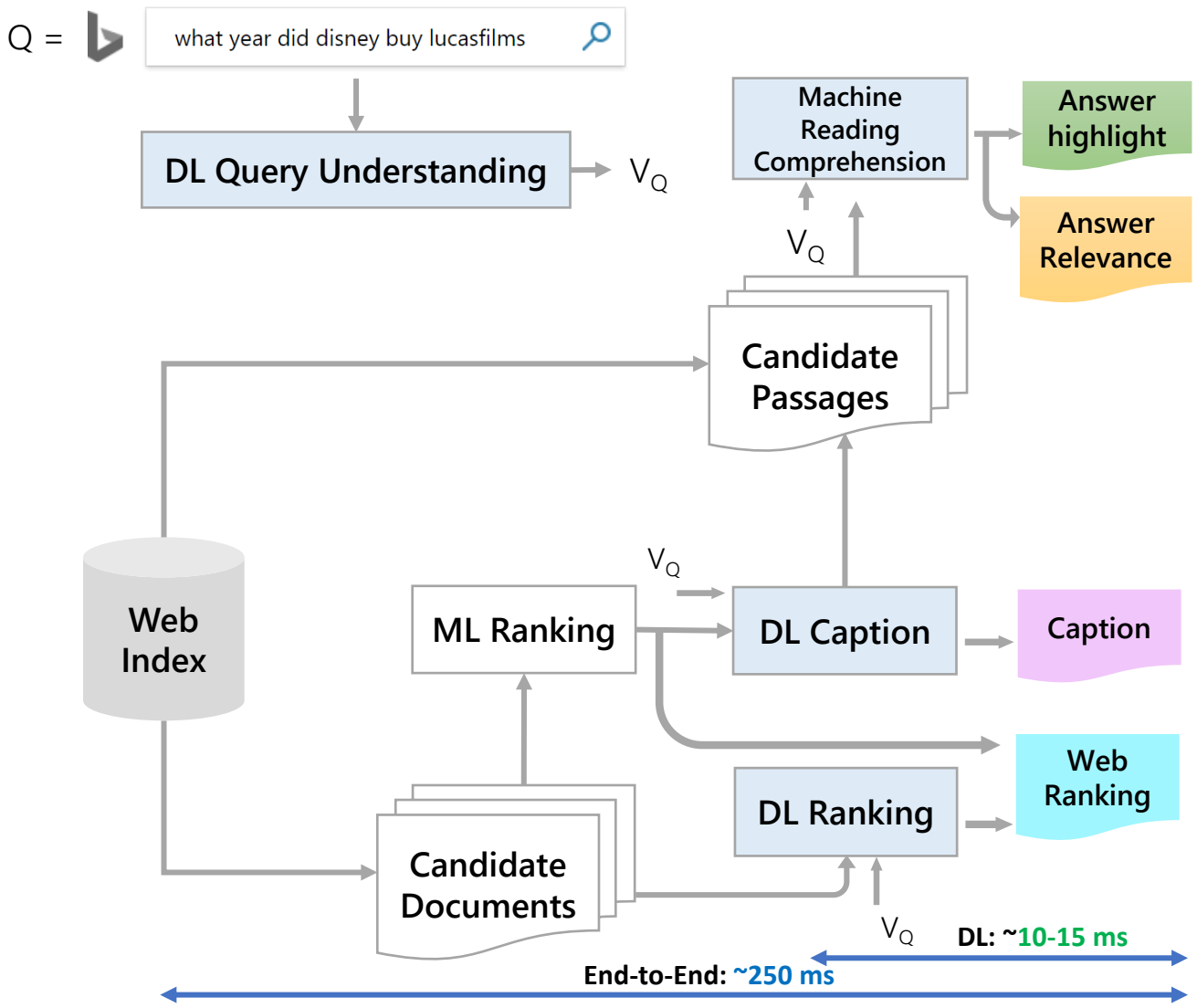
Web Search Powered by Deep Learning



When did Disney buy Lucasfilm?

Disney acquired Lucasfilm in October **2012** for $2.2 billion in cash and $1.855 billion in stock; since then, it has become the holding company for the Star Wars franchise. Lucasfilm Ltd. Sep 15 2019

Lucasfilm - Wikipedia

https://**en.wikipedia.org**/wiki/**Lucasfilm**

Overview | History | Filmography

Lucasfilm Ltd. LLC is an American film and television production company that is a subsidiary of The Walt Disney Studios, a division of The Walt Disney Company. The studio is best known for creating and producing the Star Wars and Indiana Jones franchises, as well as its leadership in developing special effects, sound and computer animation for film. Lucasfilm was founded by filmmaker George Lucas in 1971 in San Rafael, California; most of the company's operations were moved to San Francisco in

See more on en.wikipedia.org · Text under CC-BY-SA license

Industry: Film
Products: Motion pictures, Television
Founded: December 10, 1971; 47 years ago
Number of employees: 2,000 (2015)

Disney buys Lucasfilm for $4 billion - USA TODAY

https://**www.usatoday.com**/story/money/business/2012/10/30/**disney**-star-wars-**lucasfilm**/...

Oct 30, 2012 · Luke Skywalker and Han Solo are joining Mickey Mouse, Buzz Lightyear and Iron Man in **Disney**'s roster of heroes. **Disney** is buying **Lucasfilm** for …

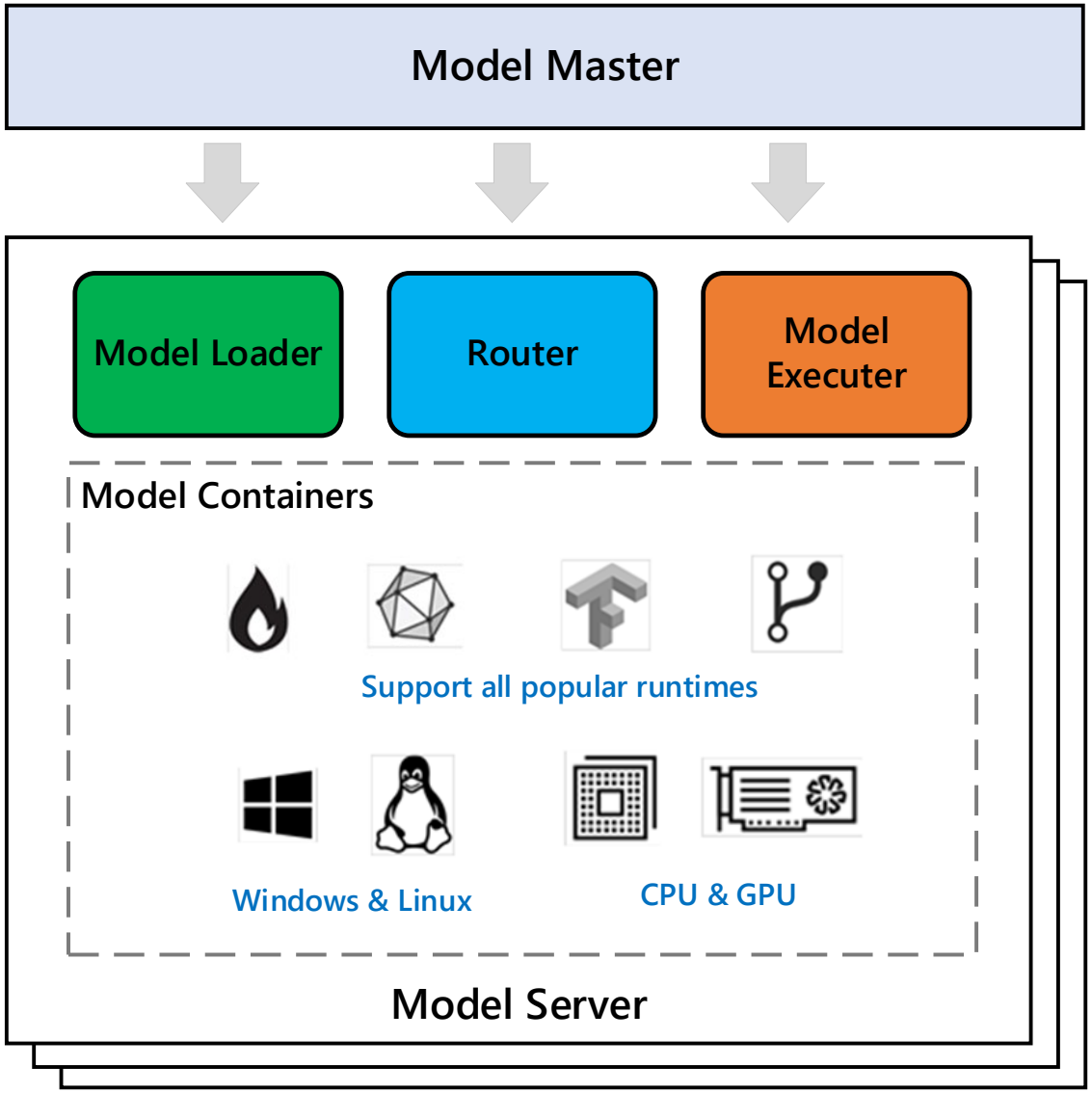
Six years after buying Lucasfilm, Disney has recouped its ...

https://**www.cnbc.com**/2018/10/30/six-**years**-after-**buy**ing-**lucasfilm-disney**-has-recouped...

Oct 30, 2018 · Six years ago, Disney bought Lucasfilm for **$4.05 billion**. The four Star Wars feature films Disney has released since **2015** have grossed more than $4.8 billion at the box office.

Author: Sarah Whitten

Deep Learning Inference as a Microservice



Single digit millisecond inference

Millions of DL model inferences per second

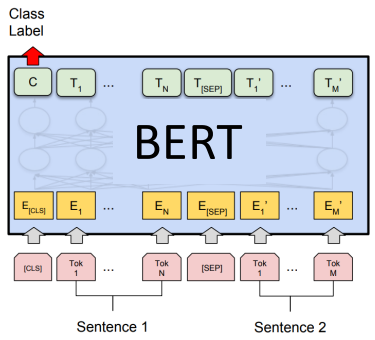
Hundreds of models on various deep leaning frameworks

Tens of thousands of servers with CPU/GPU

Forty data centers worldwide

New model deployment in **minutes**

Model Optimization



Original Model on TF CPU: 307ms

System Optimization
Original Model on DeepCPU: 66ms

System Optimization:
Operator fusion, parallel execution, and half precision
Same accuracy

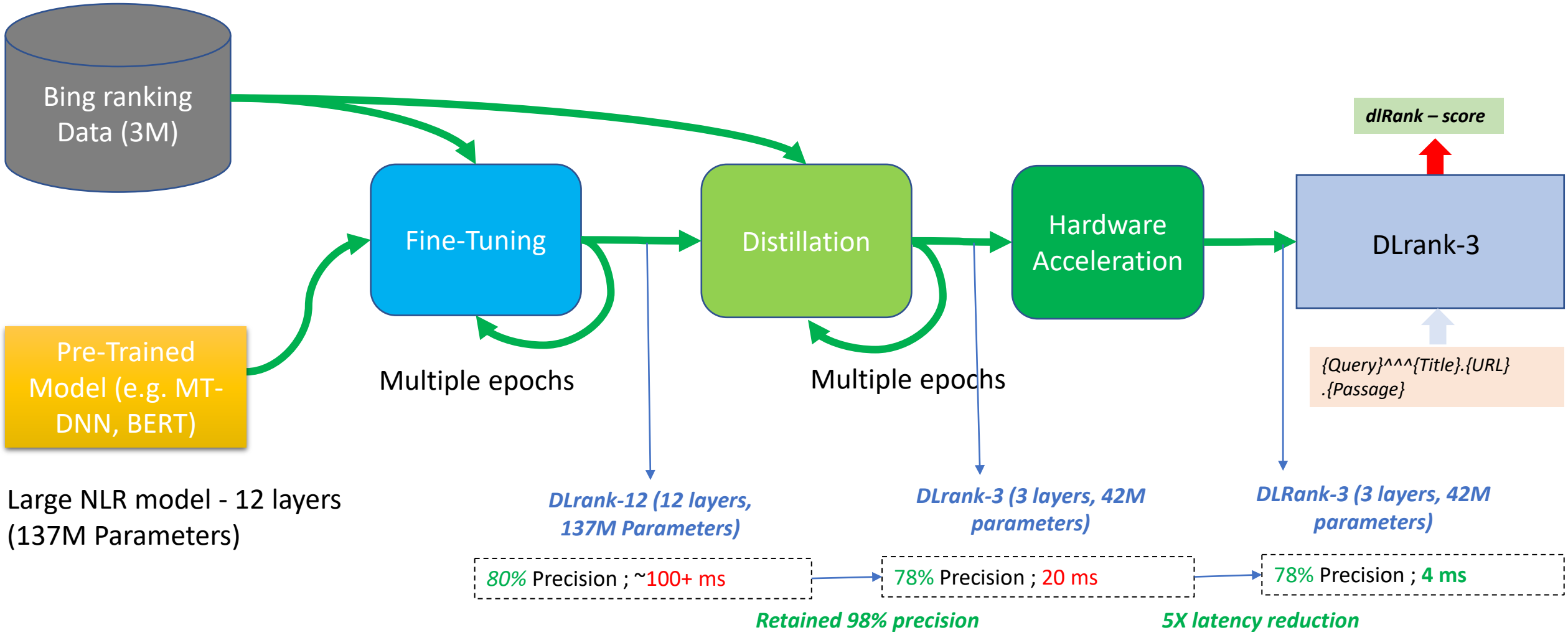
Model Optimization
Distilled Model on DeepCPU: 22ms

Model Distillation:
12 layer, 137M parameter -> 3 layer, 42M parameter,
Retained 98% precision

System Optimization
Distilled Model on DeepGPU: 6ms
Batch Size 64

Inferences per second worldwide	0.5M
# of GPUs	2000+
Flops per inference	6.4 Gflops
Sequence Length	128
Vocabulary size	120k

DL Ranking : Case-Study : shipping a deep model takes a village.



MalBERT: Technique Overview

Bing + Google QnA (1.4M)

Fine-Tuning

Distillation

Hardware Acceleration

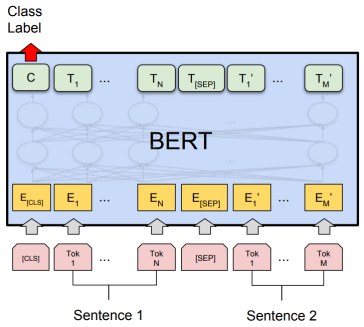
MalBERT-3

MalBERT – score

{Query}^^^{Title}.{Passage}

Multiple epochs

Multiple epochs



BERT-Base: 12 layers (137M Parameters)

MalBERT-12 (12 layers, 137M Parameters)

MalBERT-3 (3 layers, 42M parameters)

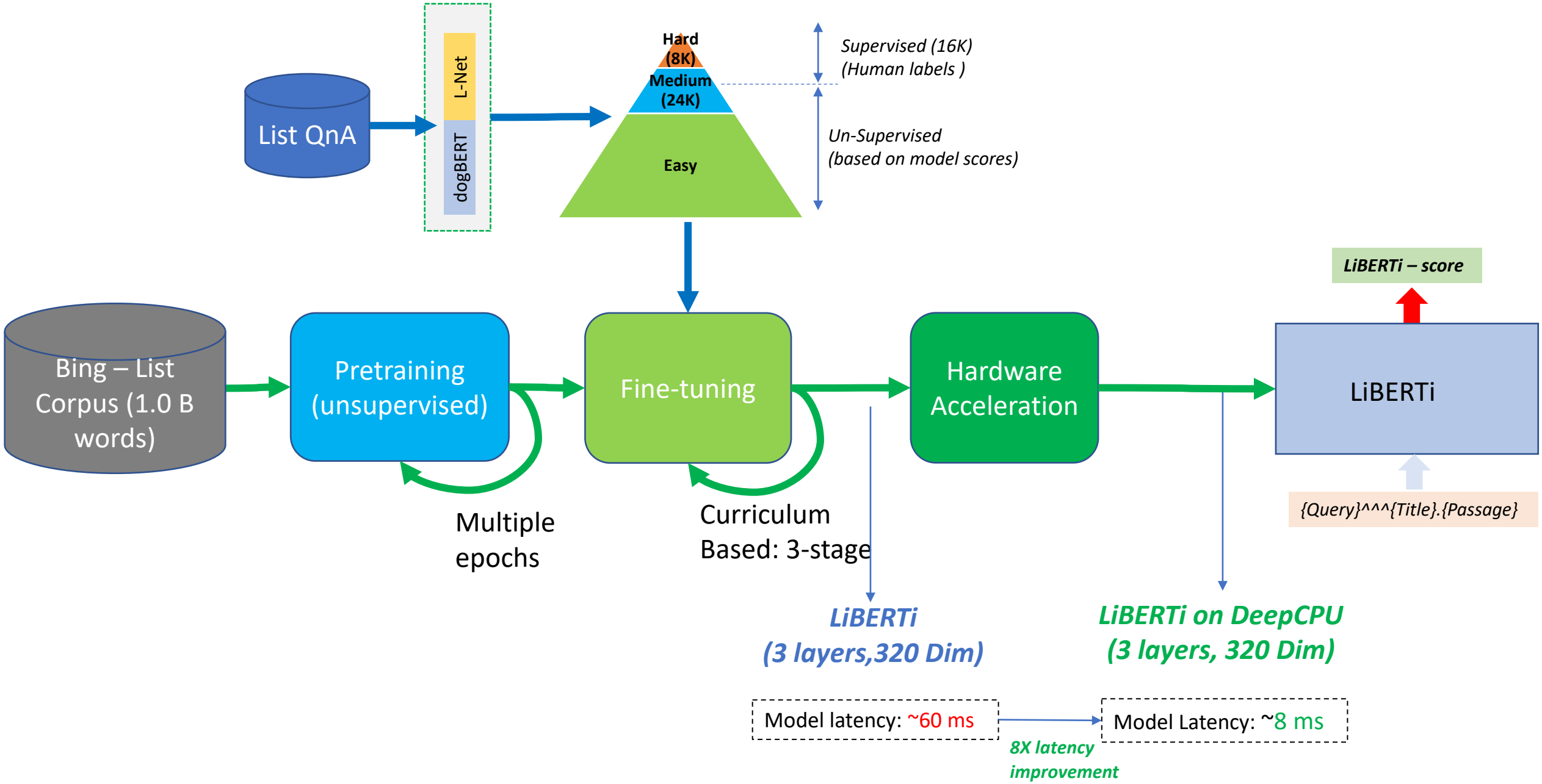
MalBERT-3 (3 layers, 42M parameters)

80% Precision ; ~100+ ms

78% Precision ; 20 ms

78% Precision ; **4 ms**

Retained 98% precision

5X latency reduction

LiBERTi: Technique Overview