

## **Achieve Production-Grade** Performance, Faster.

Simplify and accelerate the development of deep learning with advanced tools to build, optimize, and deploy highly accurate and efficient models.

#### The Barrier to Production

Deep learning-powered advancements in Al have led to innovations that have the potential to revolutionize companies across many industries. But prolonged development cycles, high computing costs, and impracticality of deployment are major roadblocks in the path to Al implementation.

#### **Deci's Deep Learning Platform**

Deci is a deep learning development platform that enables AI practitioners to easily build, optimize, and deploy highly accurate and efficient models to any environment including cloud, edge, and mobile. Powered by its proprietary automated Neural Architecture Construction technology (AutoNAC), Deci harnesses AI to eliminate production-related bottlenecks across the deep learning lifecycle.



#### Shorten Development Time

Go from data to production-ready models in days. No more manual trial & error iterations, intense engineering efforts, or time wasted on boilerplate & pipeline code. Reach production faster and empower your teams with advanced tools.





#### **Accelerate Inference Performance**

Eliminate dev risk & uncertainty. Easily accelerate inference performance on any hardware by up to 5x without compromising on accuracy. Reduce the latency of real-time applications or increase throughput for large scale inference

# 3.9x Faster Latency (Same Accuracy)

Inference HW: NVIDIA V100 GPU | Task: Facial liveness classification



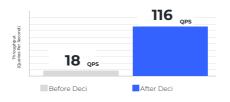


#### **Scale Up Inference Efficiently**

Dramatically increase inference hardware utilization to make the most of your current hardware or move to one that's more affordable. Enable new use cases on CPU and edge devices or cut up to 80% of your cloud compute costs

#### 6.44x Higher Throughput (Same Accuracy)

Inference HW: AMD EPYC 7773X | Task: NLP, Question answering



#### **Deep Learning Across the Board**

#### **Deep Learning Tasks**

- Computer Vision: Image Classification, Object Detection, Semantic Segmentation
- NI D

#### **Deployment Options**

- Public Cloud: AWS, GCP, Azure
- Datacenter
- Edge / Server
- Mobile
- Browser

#### **Inference Hardware**

- CPU
- GPU
- ARM-based
- Mobile Al Chip
- Specialized AI Chip

#### Sample Use Cases

- Video analytics
- Security cameras
- Autonomous cars
- Image/video editing
- Medical diagnostics
- Manufacturing QA
- Robotics
- Media & entertainment

Vadim Zhuk, Senior VP R&D

RingCentral

"At RingCentral, we strive to provide our customers with the best Al-based experiences. With Deci's platform, we were able to exceed our deep learning performance goals while shortening our development cycles. Working with Deci allows us to launch superior products faster."

Trusted by Industry Leaders













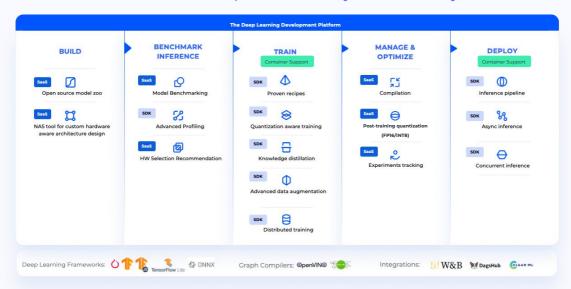






### Production-Aware Development with Deci's Deep Learning Platform

Go from data to production-ready model in 14 days



#### **Main Capabilities Overview**



#### **Gain Superior Performance** with Custom Architectures

Build accurate & efficient architectures tailored to your hardware and application's performance targets with Deci's AutoNAC engine.



#### **Simplify Runtime** Optimization

Easily compile and quantize your models (FP16/INT8) and evaluate different production settings with a click of a button.



#### **Easily Find the Best** Hardware for the Job

Benchmark vour models' inference performance across multiple hardware types with Deci's online hardware fleet. Get actionable insights and select the optimal hardware



#### **Maximize Accuracy with Advanced Training Techniques**

models with SuperGradients. Leverage custom recipes and advanced training techniques (e.g., knowledge distillation, quantization-aware training) with one line of code.



#### **Streamline Deployment** with 3 Lines of Code

Deploy your models with Infery, Deci's simple-to-use, unified, model inference API. Streamline deployment and boost serving performance with parallelism and concurrent execution. Compatible with multiple frameworks and hardware types.

ooo Automate Model Senchmarking

Easily measure and compare the performance of various models on your inference hardware

**80**% Shorter development

costs on average

Inference acceleration cost reduction

#### For Everyone in the **AI-Driven Organization**

#### **Tech Executives**

Reduce time to market by 80% and lower development cost by 30%. Supercharge your AI teams with advanced tools.

#### **Data Scientists**

Deliver state-of-the-art models, faster than ever, without worrying about performance or model size. Focus on your core competency: solving business problems with AI.

#### **ML Engineers**

Easily optimize models for various hardware types with a few clicks. Seamlessly deploy and maximize application performance with advanced serving capabilities.

#### **Product Leaders**

Unlock new use cases and release new features to production faster without compromising on quality.

process on average

**30**% Lower development

Inference & training

#### **Pallav Vyas**

Senior Engineering Manager, Document Al & Innovation



"At Adobe, we are committed to redefining the possibilities of digital experiences and delivering excellent Al-based solutions across a wide range of cloud and edge environments. By using Deci, we significantly shortened our time to market and transitioned inference workloads from cloud to edge devices. As a result we improved the user experience and dramatically reduced our spend on cloud inference cost.'

**BOOK A DEMO** 

For more information. please contact:

