

22% faster

prediction of secondary structure of proteins with BERT-Large.¹

18% faster

disorder classification in chest X-ray images using CheXNet.²

“Habana® Gaudi® AI processors enable both tensor operations and matrix multiplications on hardware, delivering powerful performance by optimally compiling deep learning computational Graphs.”

Mr. Kei Taneishi,
Data Scientist,
National Research and Development Agency
RIKEN Photonics
Research Center

RIKEN Accelerates Medical and Drug Research with Habana® Gaudi® AI Processor

RIKEN is Japan's largest research organizations with institutes and centers in locations throughout Japan. To advance the future of AI drug discovery, Mr. Kei Taneishi, a data scientist, has conducted research on Deep Learning based disease analysis with medical imaging, including chest X-rays, virtual screening of small molecules affecting molecular targets, and the structural and functional changes of proteins. AI-based research in these areas demands a large-scale computational platform, making AI accelerators vital. Using the Habana® Gaudi® AI processor on Amazon EC2 DL1 instances, powered by 3rd Gen Intel® Xeon® Scalable processors, Taneishi examined deep learning training in two areas where he observed faster training results compared to current generation GPU-based EC2 instances.

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