

Founders of DeepMind, OpenAI and Chief Scientist at Uber back Graphcore in new \$30m funding round led by Atomico

Graphcore IPU products will lower the cost of accelerating AI applications, increase the performance of both training and inference by 10x to 100x compared to the fastest systems today and enable recent success in deep learning to evolve rapidly towards useful, general artificial intelligence.

20 July 2017, Bristol, UK. Machine intelligence company, Graphcore, has today announced a \$30 million Series B funding round, led by Atomico. The new funding comes as the company prepares to ship its first Intelligence Processing Unit (IPU) hardware to customers later this year, with scale-up production for enterprise datacentres and cloud environments in 2018.

The Series B round is dedicated to accelerating roadmap development and building a community of developers and partners around its Poplar™ graph framework software, establishing Graphcore as the leader in the market for machine intelligence processors.

Nigel Toon, CEO at Graphcore said: “Atomico has a genuinely deep understanding of the machine intelligence market and how it will evolve over the coming years. They also share our vision for building a major new company that can stand at the forefront of what we call ‘Compute 2.0’ – this new age of machine intelligence computing. Many of the leading innovators that we have been working with over the last three years will be early access customers and we will have an exciting time over the next few months.”

Siraj Khaliq, the Atomico Partner who will join the Graphcore board of directors, said: “It’s clear that machine intelligence will sit at the heart of the technological leaps we’ll see in this coming chapter of human history – a process already well underway. Graphcore’s first IPU delivers one to two orders of magnitude more performance over the latest industry offerings, making it possible to develop new models with far less time waiting around for algorithms to finish running. In that sense, the IPU doesn’t just accelerate code, it should help developers accelerate the pace of innovation itself.”

Alongside Atomico as lead investor, the round has full support and follow-on funding from existing investors: Amadeus Capital, Robert Bosch Venture Capital, C4

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Ventures, Dell Technologies Capital, Draper Esprit, Foundation Capital, Pitango and Samsung Catalyst Fund.

AI pioneers [Demis Hassabis](#) (DeepMind), [Greg Brockman](#) (OpenAI), [Ilya Sutskever](#) (OpenAI), [Pieter Abbeel \(UC Berkeley/OpenAI\)](#), Scott Gray (OpenAI) and [Zoubin Ghahramani](#) (University of Cambridge, Chief Scientist at Uber) have also joined the round as angel investors. This gives Graphcore a direct line to top machine learning thought leaders, maximising its impact on the machine intelligence ecosystem.

Demis Hassabis, said: “Building systems capable of general artificial intelligence means developing algorithms that can learn from raw data and generalize this learning across a wide range of tasks. This requires a lot of processing power, and the innovative architecture underpinning Graphcore's processors holds a huge amount of promise.”

Greg Brockman, said: “Training machine intelligence models in minutes rather than days or weeks will profoundly transform how developers work, how they experiment and the results they will see. Being able to experiment across a much broader front, at a much faster pace will create new breakthroughs and will allow us to combine many machine intelligence techniques to jumpstart progress.”

Zoubin Ghahramani, commented: “Deep neural networks have allowed us to make massive progress over the last few years, but there are also many other machine learning approaches that could help us achieve radical leaps forward in machine intelligence. Current hardware is holding us back from exploring these different approaches. A new type of hardware that can support and combine alternative techniques, together with deep neural networks, will have a massive impact.”

The company is building a community of developers around its Poplar™ graph-framework software, which provides a seamless interface to multiple machine learning frameworks, including Tensorflow, MxNet, Caffe2 and PyTorch.

Poplar is a C++ framework, not a new programming language, which abstracts the graph-based machine learning development process from the underlying graph processing IPU hardware. Poplar includes a comprehensive, open source set of graph libraries for machine learning, which means existing user applications written in standard machine learning frameworks, like Tensorflow and MXNet, will work out of the box on an IPU. It will also be a natural basis for future machine intelligence programming paradigms which extend beyond tensor-centric deep learning. Machine learning innovators who want to be first to find out more can register their

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interest [here](#).

About Graphcore

Graphcore's Intelligence Processing Unit (IPU) products let innovators create next generation machine intelligence. The IPU is the first processor to be designed specifically for machine intelligence and will deliver between 10x to 100x acceleration compared to today's hardware. Graphcore is backed by leading venture capital and strategic investors including [Amadeus Capital Partners](#), [Atomico](#), [C4 Ventures](#), [Dell Technologies Capital](#), [Draper Esprit](#), [Foundation Capital](#), [Pitango Venture Capital](#), [Robert Bosch Venture Capital](#) and Samsung Catalyst Fund, and is headquartered in Bristol UK.

More information can be found at <https://www.graphcore.ai>

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