



**Preferred Networks, Inc. (PFN)** is a technology company with the mission to make the real world computable by applying deep learning and other advanced technologies to solve difficult real-world problems. Founded in March 2014, PFN focuses on the use of deep learning in transportation systems, manufacturing and healthcare, in addition to projects in personal robots, plant optimization, materials discovery, sports analytics, entertainment and more. PFN also develops its own supercomputers and core technologies to support its deep learning capabilities.

## Quick Facts

<b>Headquarters</b>	Otemachi Building, 1-6-1, Otemachi, Chiyoda-ku, Tokyo, Japan
<b>Founded</b>	March 26, 2014
<b>Business</b>	Research, development and sales of software, hardware and network technologies that incorporate deep learning and other advanced technologies
<b>US subsidiary</b>	Preferred Networks America, Inc. 330 Primrose Rd., Suite 300, Burlingame, CA 94010
<b>Employees</b>	Over 300
<b>Website</b>	<a href="https://www.preferred.jp">https://www.preferred.jp</a>

## Board of Directors

Toru Nishikawa	CEO, Representative Director	Shinya Hanamura	Outside Director
Daisuke Okanohara	COO, Representative Director	Shinichi Koizumi	Outside Director
Ryosuke Okuta	CTO, Director	Hiroyuki Morikawa	Outside Director

## Corporate Officers

Takuya Akiba	VP, Machine Learning Infrastructure	Hiroyuki Kobayashi	VP, Life and Materials Science
Yusuke Doi	VP, Computing Infrastructure	Masakazu Takahashi	Chief Security Officer
Masaaki Fukuda	VP, Consumer Products	Tomonobu Tominaga	Chief Marketing Officer
Junichi Hasegawa	Chief Business Officer	Yuya Unno	VP, Robot Solutions
Shohei Hido	VP, Industry Solutions	Kiyoshi Yamamoto	Chief Financial Officer
Susumu Ishiyama	Finance and Corporate Planning		

## PFN Fellow

Hiroshi Maruyama

## Technical Advisors

Pieter Abbeel	Professor at University of California, Berkeley
Takeo Igarashi	Professor at Graduate School of Information Science and Technology, University of Tokyo
Kenji Fukumizu	Professor at Department of Mathematical Analysis and Statistical Inference
Yarin Gal	Associate Professor at Oxford University
Vincent Sitzmann	Postdoctoral Associate at Massachusetts Institute of Technology

## Investors

Toyota Motor, Fanuc, NTT, ENEOS Holdings, Chugai Pharmaceutical, Hakuholdo DY Holdings, Hitachi, Mitsui & Co., Mizuho Bank, Tokyo Electron

## PFN Values

Motivation-driven	Learn or die	Proud, but humble	Boldly do what no one has done before
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## Awards and Recognition

<b>March 2021</b>	#4 out of 1,547 teams in Kaggle competition RANZCL CLiP for accurate evaluation of catheter placements on chest X-rays
<b>December 2020</b>	#4 out of 935 teams in Kaggle competition Lyft Motion Prediction for Autonomous Vehicles
<b>June 2020</b>	PFN-developed deep learning supercomputer MN-3 topped the Green500 list of the world's most energy-efficient supercomputers
<b>October 2019</b>	#3 out of 193 teams in the Kaggle competition Open Images 2019 - Instance Segmentation track; #4 out of 559 teams in Object Detection track
<b>May 2019</b>	Prime Minister's Award at 5th Nippon Venture Awards
<b>February 2019</b>	Chainer™ wins Nihon Keizai Shimbun Award at Nikkei Superior Products and Services Awards
<b>November 2018</b>	#6 out of 1,499 teams in Kaggle competition Kaggle RSNA Pneumonia Detection Challenge
<b>October 2018</b>	Semi-Grand Prix, Industries/Markets Category, CEATEC Award 2018
<b>September 2018</b>	#2 out of 454 teams in Object Detection Track at Google AI Open Images
<b>May 2018</b>	Best Paper Award on Human-Robot Interaction at IEEE International Conference on Robotics and Automation 2018
<b>May 2018</b>	Chainer wins Open Source Data Science Project Award at Open Data Science Conference East 2018
<b>March 2018</b>	PaintsChainer™ wins Excellence Award in Entertainment Division at 21st Japan Media Arts Festival
<b>July 2017</b>	Emerging Leader Award at 2017 Japan-U.S. Innovation Awards
<b>March 2017</b>	Technology Award at FT ArcelorMittal Boldness in Business Awards 2017
<b>February 2017</b>	Minister of Economy, Trade and Industry (METI)'s Awards (Partnership of Venture Businesses and Large Enterprises), 3rd Nippon Venture Awards
<b>July 2016</b>	#2 (score tie with #1) out of 16 teams for pick task, #4 for stow task at Amazon Picking Challenge

## Milestones

<b>March 2021</b>	Announces collaboration with Toei Animation to streamline anime production using Scenify™ background image production tool
<b>March 2021</b>	Unveils deep learning-based digital asset generation system for creative industries
<b>March 2021</b>	Jointly develops autonomous navigation system for construction site robots with Kajima Corporation, introduced robots to Tokyo area sites
<b>December 2020</b>	Establishes a joint venture YP Switch with Yaruki Switch Group for programming education
<b>October 2020</b>	Jointly develops deep learning-based chest X-ray image analysis tool for lung cancer diagnosis with Kyoto Medical Association and others
<b>September 2020</b>	Establishes a joint venture with Mitsui & Co. to develop and commercialize a deep learning-based AI solution for subsurface structure analysis.
<b>August 2020</b>	Releases Playgram Typing (beta), a typing practice website for children
<b>July 2020</b>	Launches computer science education business, teams up with Yaruki Switch Group for courses using programming education app Playgram™
<b>May 2020</b>	MN-3, PFN's first supercomputer powered by deep learning processor MN-Core™ (jointly developed by PFN and Kobe University) begins operation
<b>January 2020</b>	Releases v1 of Optuna™ hyperparameter optimization framework for machine learning
<b>December 2019</b>	Starts migrating deep learning framework from Chainer™ to PyTorch
<b>November 2019</b>	Launches collaborative project for sebum RNA monitoring technology
<b>August 2019</b>	Begins joint development of service robots with Toyota Motor
<b>July 2019</b>	PFN's supercomputer MN-2 begins operation
<b>June 2019</b>	Receives 1 billion yen investment from JXTG Holdings in a capital tie-up
<b>April 2019</b>	Releases technology for Crypko™ character generation platform
<b>December 2018</b>	Unveils deep learning processor MN-Core™ at Semicon Japan 2018
<b>November 2018</b>	Establishes a joint venture Preferred Medicine, Inc. in the United States with Mitsui & Co.
<b>October 2018</b>	Unveils Autonomous Tidying-Up Robot System at CEATEC Japan 2018, announces entry to the area of personal robots
<b>August 2018</b>	Receives 700 million yen investment from Chugai Pharmaceutical
<b>August 2018</b>	Receives 200 million yen investment from Tokyo Electron
<b>July 2018</b>	PFN's supercomputer MN-1b begins operation
<b>December 2017</b>	Receives 500 million yen investment from Hakuholdo DY Holdings, Mitsui & Co., Mizuho Bank and Hitachi respectively in capital tie-ups
<b>December 2017</b>	Receives additional investment of 500 million yen from Fanuc
<b>September 2017</b>	PFN's supercomputer MN-1 begins operation
<b>August 2017</b>	Receives additional investment of 10.5 billion yen from Toyota Motor
<b>January 2017</b>	Releases PaintsChainer™ Beta (later rebranded as Petalica Paint), automatic line art colorization service
<b>November 2016</b>	Begins joint development project for AI-enabled integrated cancer treatment system with National Cancer Center Japan and others
<b>July 2016</b>	Establishes a joint venture PFDēNA with DeNA with 15 million yen invested from each company
<b>April 2016</b>	Moves headquarters to Otemachi, Chiyoda-ku, Tokyo
<b>December 2015</b>	Receives 1 billion yen investment from Toyota Motor in a capital tie-up
<b>August 2015</b>	Receives 900 million yen investment from Fanuc in a capital tie-up
<b>June 2015</b>	Forms business tie-up with Fanuc
<b>June 2015</b>	Releases Chainer™, open-source deep learning framework
<b>October 2014</b>	Receives 200 million yen investment from NTT in a capital and business tie-up
<b>October 2014</b>	Begins joint research with Toyota Motor
<b>March 2014</b>	Preferred Networks is founded in Hongo, Bunkyo-ku, Tokyo