



Preferred Networks, Inc. (PFN) is a technology company with the mission to make the real world computable by applying advanced technologies to solve difficult real-world problems. PFN develops advanced software and hardware technologies in tandem for AI in a vertically integrated approach, covering the entire AI value chain from chips, supercomputers, generative AI foundation models to applications. Founded in March 2014 in Tokyo, PFN has incorporated its technologies into products and services for a range of industries including manufacturing, transportation, healthcare, entertainment and education. PFN's MN-3, a supercomputer powered by its MN-Core™ deep learning processor, topped the Green500 ranking for energy efficiency three times in 2020 and 2021.

Quick Facts

Headquarters	Otemachi Building, 1-6-1, Otemachi, Chiyoda-ku, Tokyo, Japan
Founded	March 26, 2014
Business	Research, development and sales of software, hardware and network technologies that incorporate deep learning and other advanced technologies
Subsidiaries	Preferred Networks America, Inc. (U.S. subsidiary), Preferred Robotics, Inc., Preferred Computational Chemistry, Inc., Preferred Elements, Inc.
Employees	Approx. 300
Website	https://www.preferred.jp

Board of Directors

Toru Nishikawa	Chief Executive Officer, Co-Founder
Daisuke Okanohara	Chief Executive Researcher, Co-Founder
Shinichi Koizumi	Outside Director
Hiroyuki Morikawa	Outside Director
Kaname Masuda	Outside Director

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 Institute of Mathematical Analysis and Statistical Inference
Ju Li	Professor 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

November 2023	#5 and #9 out of 616 teams in Kaggle competition Fast or Slow? Predict AI Model Runtime
October 2023	#4 and #5 out of 2,662 teams in Kaggle competition LLM Science Exam
October 2023	MN-Core™ series of deep learning processors wins Semi-Grand Prix, Advanced Technology Category, CEATEC Award 2023
August 2023	#3 out of 954 teams in Kaggle competition Google Research - Identify Contrails to Reduce Global Warming
May 2023	#2 out of 1,231 teams in Kaggle competition Stable Diffusion - Image to Prompts
January 2023	#2 out of 936 teams in Kaggle competition G2Net Detecting Continuous Gravitational Waves
November 2022	#1 out of 1,220 teams in Kaggle competition for predicting how DNA, RNA & protein measurements co-vary in single cells
June 2022	Academic paper on Matlantis™'s core technology PFP was selected as Nature Communications Editor's Highlights
April 2022	#1 out of 1,588 teams in Kaggle competition Happywhale for accurate identification of whales and dolphins
November 2021	PFN-developed deep learning supercomputer MN-3 tops the Green500 list of the world's most energy-efficient supercomputers for the third time
November 2021	Computer science education app Playgram™ receives Japan e-Learning Award
June 2021	MN-3 tops the Green500 list for the second time
March 2021	#4 out of 1,547 teams in Kaggle competition RANZCL CLiP for accurate evaluation of catheter placements on chest X-rays
December 2020	#4 out of 935 teams in Kaggle competition Lyft Motion Prediction for Autonomous Vehicles
June 2020	MN-3 at #1 in Green500 for the first time
May 2020	Best Paper Award at CHI 2020, a conference on human-computer interaction
October 2019	#3 out of 193 teams in the Kaggle competition Open Images 2019 - Instance Segmentation track; #4 out of 559 teams in Object Detection track
May 2019	Prime Minister's Award at 5th Nippon Venture Awards
February 2019	Chainer™ wins Nihon Keizai Shimbun Award at Nikkei Superior Products and Services Awards
November 2018	#6 out of 1,499 teams in Kaggle competition Kaggle RSNA Pneumonia Detection Challenge
October 2018	Autonomous Tidying-up Robot System wins Semi-Grand Prix, Industries/Markets Category, CEATEC Award 2018
September 2018	#2 out of 454 teams in Object Detection Track at Google AI Open Images
May 2018	Best Paper Award on Human-Robot Interaction at IEEE International Conference on Robotics and Automation 2018
May 2018	Chainer wins Open Source Data Science Project Award at Open Data Science Conference East 2018
March 2018	PaintsChainer™ wins Excellence Award in Entertainment Division at 21st Japan Media Arts Festival
July 2017	Emerging Leader Award at 2017 Japan-U.S. Innovation Awards
March 2017	Technology Award at FT ArcelorMittal Boldness in Business Awards 2017
February 2017	Minister of Economy, Trade and Industry (METI)'s Awards (Partnership of Venture Businesses and Large Enterprises), 3rd Nippon Venture Awards
July 2016	#2 (score tie with #1) out of 16 teams for pick task, #4 for stow task at Amazon Picking Challenge

Milestones

May 2024	Begins AI-based autonomous operation of oil-processing unit in ENEOS Kawasaki Refinery
May 2024	Begins P-FEP calculation service for in-silico drug discovery
February 2024	PFE begins 10 billion-parameter multimodal foundation model under NEDO support
December 2023	Begins research for ultra-low-power AI accelerator under NEDO support
November 2023	Establishes multimodal foundation model subsidiary Preferred Elements
October 2023	Releases open-source large language model PLaMo-13B
August 2023	PFN and ENEOS begin continuous autonomous operation of petrochemical plant system
May 2023	Preferred Robotics launches Kachaka autonomous mobile robot for home
October 2022	HAPIiBOT, a cleaning robot co-developed by Amano and PFRobotics, goes on sale
October 2022	Launches GAN-based entertainment mobile app MEMES
June 2022	Launches deep learning-based 3D scanning service PFN 3D Scan
April 2022	Launches Crypko™ anime character art generating platform as web service
March 2022	Preferred Robotics receives total investment of 600 million yen from Asahi Kasei Homes and Sumitomo-Mitsui Bank
November 2021	Establishes autonomous mobile robot subsidiary Preferred Robotics (PFRobotics), receives investment of 2 billion yen from Amano
September 2021	Develops AI drug discovery technology, discovers lead compounds for COVID-19
July 2021	Develops deep learning-based 3D pose estimation technology adopted by SoftBank's sign language service
July 2021	PFCC launches Matlantis™ atomistic simulator
June 2021	Establishes a joint venture Preferred Computational Chemistry (PFCC) with ENEOS
March 2021	Announces collaboration with Toei Animation to streamline anime production using Scenify™ background image production tool
March 2021	Jointly develops autonomous navigation system for construction site robots with Kajima Corporation, introduced robots to Tokyo area sites
December 2020	Establishes a joint venture YP Switch with Yaruki Switch Group for programming education
September 2020	Establishes a joint venture with Mitsui & Co. to develop and commercialize a deep learning-based AI solution for subsurface structure analysis.
August 2020	Launches Playgram Typing (beta), a typing practice website for children
July 2020	Launches computer science education business, teams up with Yaruki Switch Group for courses using programming education app Playgram™
May 2020	MN-3, PFN's first supercomputer powered by deep learning processor MN-Core™ (jointly developed by PFN and Kobe University) begins operation
January 2020	Releases v1 of Optuna™ hyperparameter optimization framework for machine learning
November 2019	Launches collaborative project for sebum RNA monitoring technology with Kao Corporation
June 2019	Receives 1 billion yen investment from JXTG Holdings in a capital tie-up
December 2018	Unveils deep learning processor MN-Core™ at Semicon Japan 2018
November 2018	Establishes a joint venture Preferred Medicine, Inc. in the United States with Mitsui & Co.
October 2018	Unveils Autonomous Tidying-Up Robot System at CEATEC Japan 2018, announces entry to the area of personal robots
August 2018	Receives 700 million yen investment from Chugai Pharmaceutical
August 2018	Receives 200 million yen investment from Tokyo Electron
December 2017	Receives 500 million yen investment from Hakuholdo DY Holdings, Mitsui & Co., Mizuho Bank and Hitachi respectively in capital tie-ups
December 2017	Receives additional investment of 500 million yen from Fanuc
August 2017	Receives additional investment of 10.5 billion yen from Toyota Motor
January 2017	Releases PaintsChainer™ Beta (later rebranded as Petalica Paint)
November 2016	Begins joint development project for AI-enabled integrated cancer treatment system
July 2016	Establishes a joint venture PFDeNA with DeNA with 15 million yen invested from each
December 2015	Receives 1 billion yen investment from Toyota Motor in a capital tie-up
August 2015	Receives 900 million yen investment from Fanuc in a capital tie-up
June 2015	Forms business tie-up with Fanuc
June 2015	Releases Chainer™, open-source deep learning framework
October 2014	Receives 200 million yen investment from NTT in a capital and business tie-up

October 2014 Begins joint research with Toyota Motor
March 2014 Preferred Networks is founded in Tokyo