

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

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

Yutaka Ishikawa Professor, Information Systems Architecture Science Research Division, Natural

Institute of Informatics

Investors

Toyota Motor, Fanuc, NTT, ENEOS Holdings, Chugai Pharmaceutical, Hakuhodo 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



Awards and Recognition

November 2023 #5 and #9 out of 616 teams in Kaggle competition Fast or Slow? Predict Al 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

Vaves

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 Al 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

October 2024 Launches MiseMise™ operational improvement solutions for chain stores

August 2024 Launches small language model PLaMo™ Lite for edge devices

May 2024 Begins Al-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 Al 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 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 Prefered 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 investment of 700 million yen from Chugai Pharmaceutical

August 2018 Receives investment of 200 million yen from Tokyo Electron

December 2017 Receives investment of 500 million yen from Hakuhodo DY Holdings, Mitsui & Co., Mizuho

Bank and Hitachi respectively in capital tie-ups

December 2017Receives additional investment of 500 million yen from FanucAugust 2017Receives additional investment of 10.5 billion yen from Toyota MotorJanuary 2017Releases PaintsChainer™ Beta (later rebranded as Petalica Paint)

November 2016 Begins joint development project for Al-enabled integrated cancer treatment system

July 2016 Establishes a joint venture PFDeNA with DeNA with 15 million yen invested from each

December 2015 Receives investment of 1 billion yen from Toyota Motor in a capital tie-up **August 2015** Receives investment of 900 million yen 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 investment of 200 million yen 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