



**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

<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>Subsidiaries</b>	Preferred Networks America, Inc. (U.S. subsidiary), Preferred Robotics, Inc., Preferred Computational Chemistry, Inc., Preferred Elements, Inc.
<b>Employees</b>	Approx. 300
<b>Website</b>	<a href="https://www.preferred.jp">https://www.preferred.jp</a>

### Board of Directors

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

<b>November 2023</b>	#5 and #6 out of 616 teams in Kaggle competition Fast or Slow? Predict AI Model Runtime
<b>October 2023</b>	#4 and #5 out of 2,662 teams in Kaggle competition LLM Science Exam
<b>October 2023</b>	MN-Core™ series of deep learning processors wins Semi-Grand Prix, Advanced Technology Category, CEATEC Award 2023
<b>August 2023</b>	#3 out of 954 teams in Kaggle competition Google Research - Identify Contrails to Reduce Global Warming
<b>May 2023</b>	#2 out of 1,231 teams in Kaggle competition Stable Diffusion - Image to Prompts
<b>January 2023</b>	#2 out of 936 teams in Kaggle competition G2Net Detecting Continuous Gravitational Waves
<b>November 2022</b>	#1 out of 1,220 teams in Kaggle competition for predicting how DNA, RNA & protein measurements co-vary in single cells
<b>June 2022</b>	Academic paper on Matlantis™'s core technology PFP was selected as Nature Communications Editor's Highlights
<b>April 2022</b>	#1 out of 1,588 teams in Kaggle competition Happywhale for accurate identification of whales and dolphins
<b>November 2021</b>	PFN-developed deep learning supercomputer MN-3 tops the Green500 list of the world's most energy-efficient supercomputers for the third time
<b>November 2021</b>	Computer science education app Playgram™ receives Japan e-Learning Award
<b>June 2021</b>	MN-3 tops the Green500 list for the second time
<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>	MN-3 at #1 in Green500 for the first time
<b>May 2020</b>	Best Paper Award at CHI 2020, a conference on human-computer interaction
<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>	Autonomous Tidying-up Robot System wins 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>November 2023</b>	Establishes multimodal foundation model subsidiary Preferred Elements
<b>October 2023</b>	Releases open-source large language model PLaMo-13B
<b>August 2023</b>	PFN and ENEOS begin continuous autonomous operation of petrochemical plant system
<b>May 2023</b>	Preferred Robotics launches Kachaka autonomous mobile robot for home
<b>October 2022</b>	HAPiiBOT, a cleaning robot co-developed by Amano and PFRobotics, goes on sale
<b>October 2022</b>	Launches GAN-based entertainment mobile app MEMES
<b>June 2022</b>	Launches deep learning-based 3D scanning service PFN 3D Scan
<b>April 2022</b>	Launches Crypko™ anime character art generating platform as web service
<b>March 2022</b>	Preferred Robotics receives total investment of 600 million yen from Asahi Kasei Homes and Sumitomo-Mitsui Bank
<b>November 2021</b>	Establishes autonomous mobile robot subsidiary Preferred Robotics (PFRobotics), receives investment of 2 billion yen from Amano
<b>September 2021</b>	Develops AI drug discovery technology, discovers lead compounds for COVID-19
<b>July 2021</b>	Develops deep learning-based 3D pose estimation technology adopted by SoftBank's sign language service
<b>July 2021</b>	PFCC launches Matlantis™ atomistic simulator
<b>June 2021</b>	Establishes a joint venture Preferred Computational Chemistry (PFCC) with ENEOS
<b>March 2021</b>	Announces collaboration with Toei Animation to streamline anime production using Scenify™ background image production tool
<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>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>	Launches 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>November 2019</b>	Launches collaborative project for sebum RNA monitoring technology with Kao Corporation
<b>June 2019</b>	Receives 1 billion yen investment from JXTG Holdings in a capital tie-up
<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>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>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)
<b>November 2016</b>	Begins joint development project for AI-enabled integrated cancer treatment system
<b>July 2016</b>	Establishes a joint venture PFDeNA with DeNA with 15 million yen invested from each
<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 Tokyo