

SCML 2025 Report

2025/08

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Introducing SCML

ANAC Sponsors

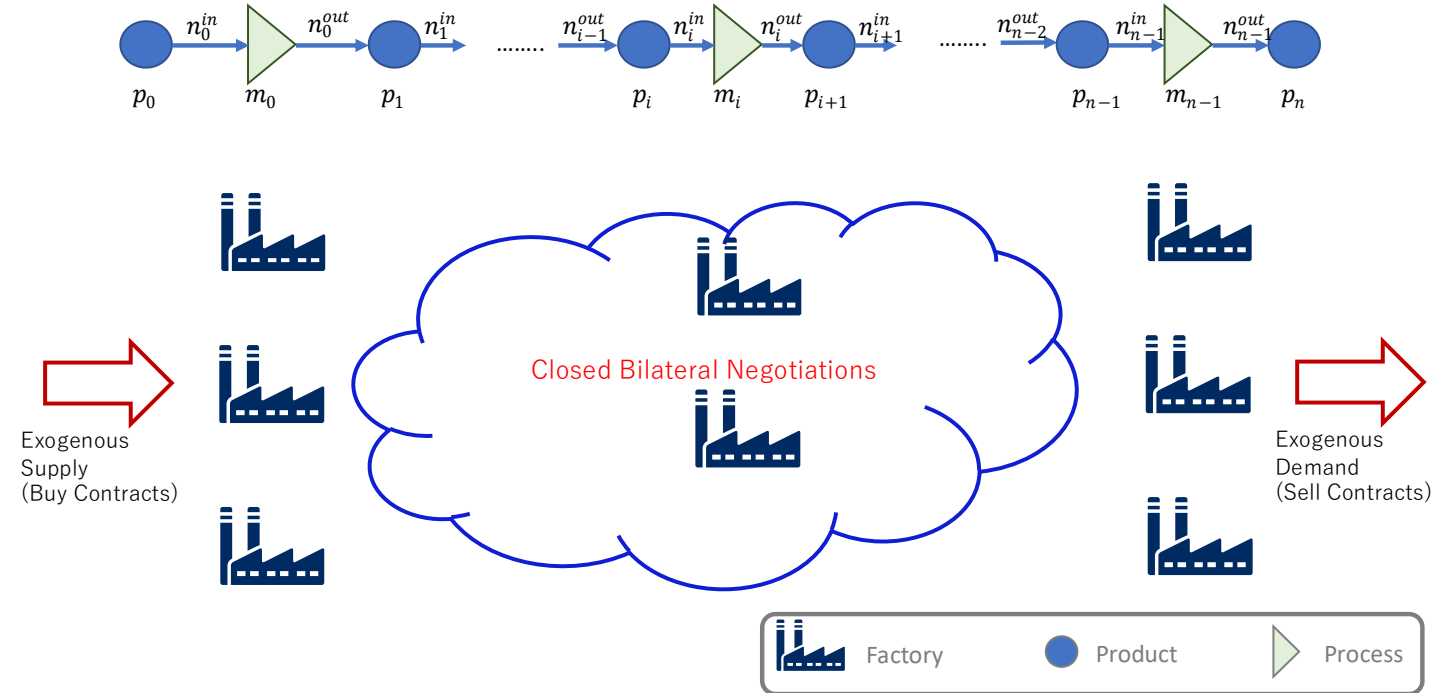


SCML Sponsors

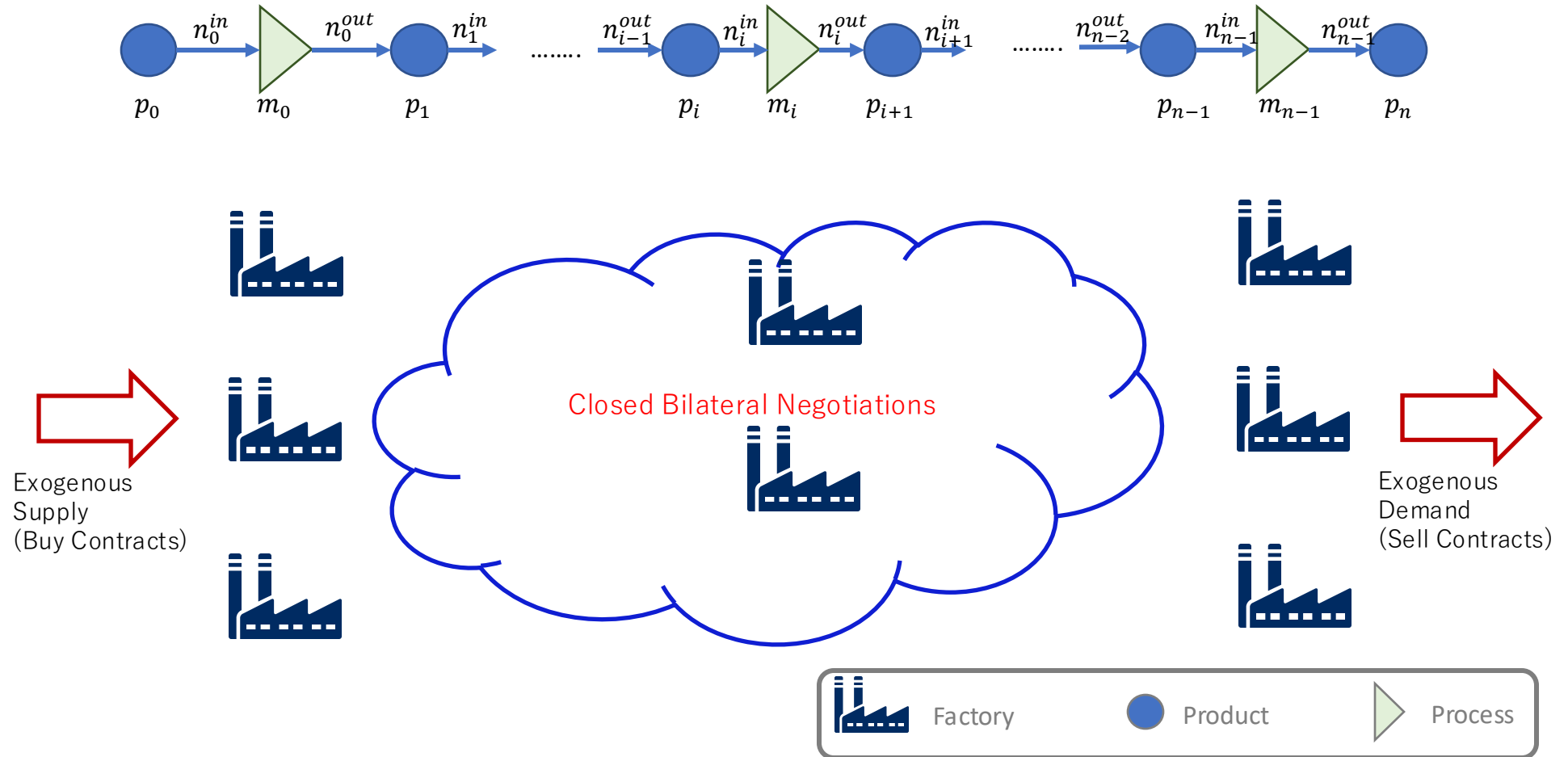


What is SCML

- Goal: move automated negotiation research further toward the real world
- Guiding Principles:
 - Simple enough but not too simple
 - Continuity matters
- Domain:
 - Situated concurrent negotiation within a market → **OneShot**
 - Repeated sequential concurrent negotiation within a market → **Standard**

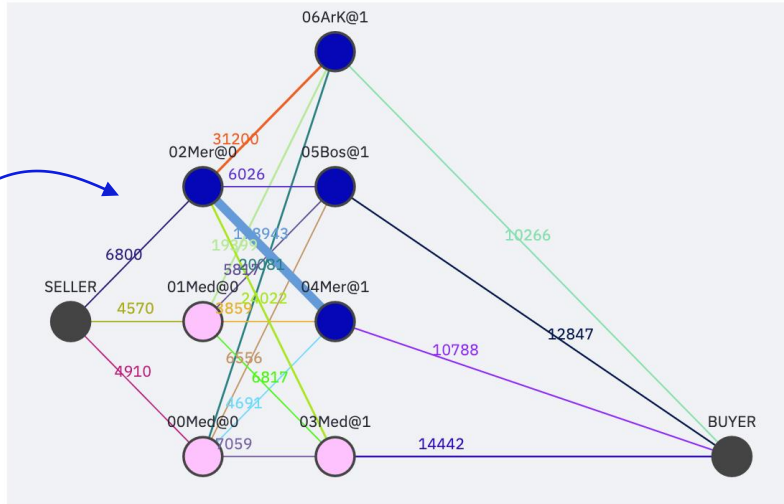


What is SCML

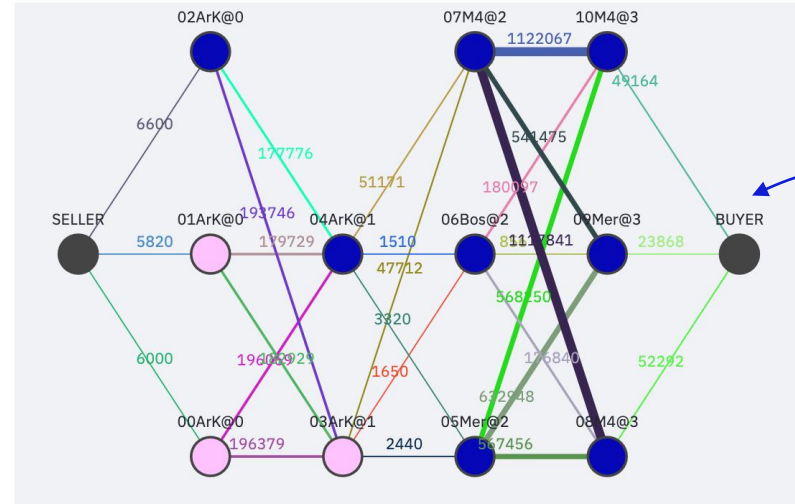


What is SCML

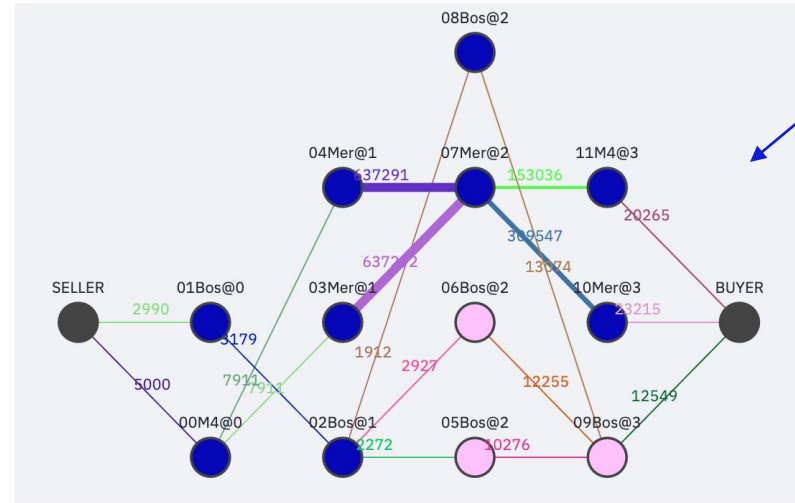
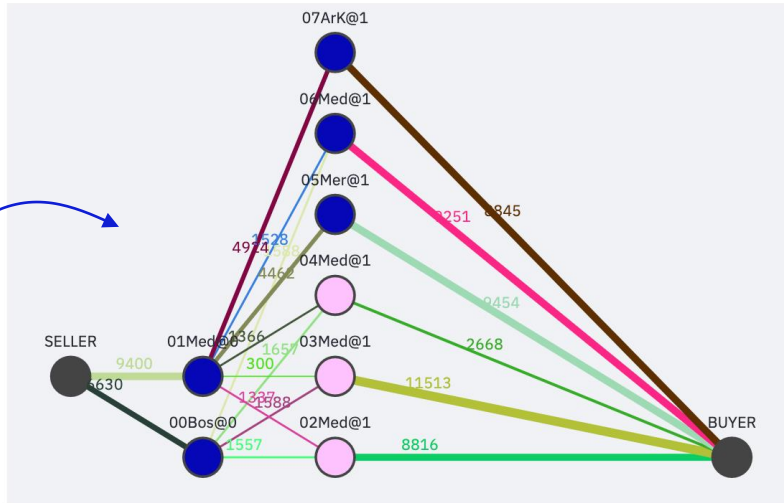
oneshot



deep

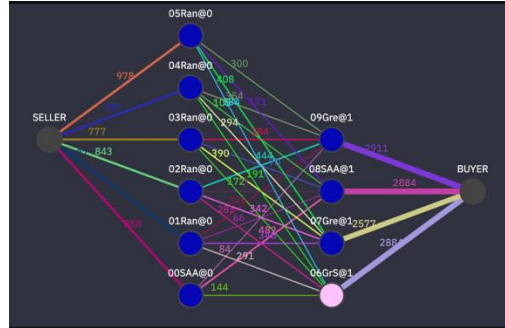


bottleneck



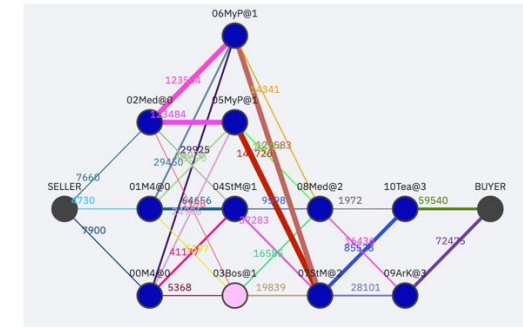
The two tracks

OneShot



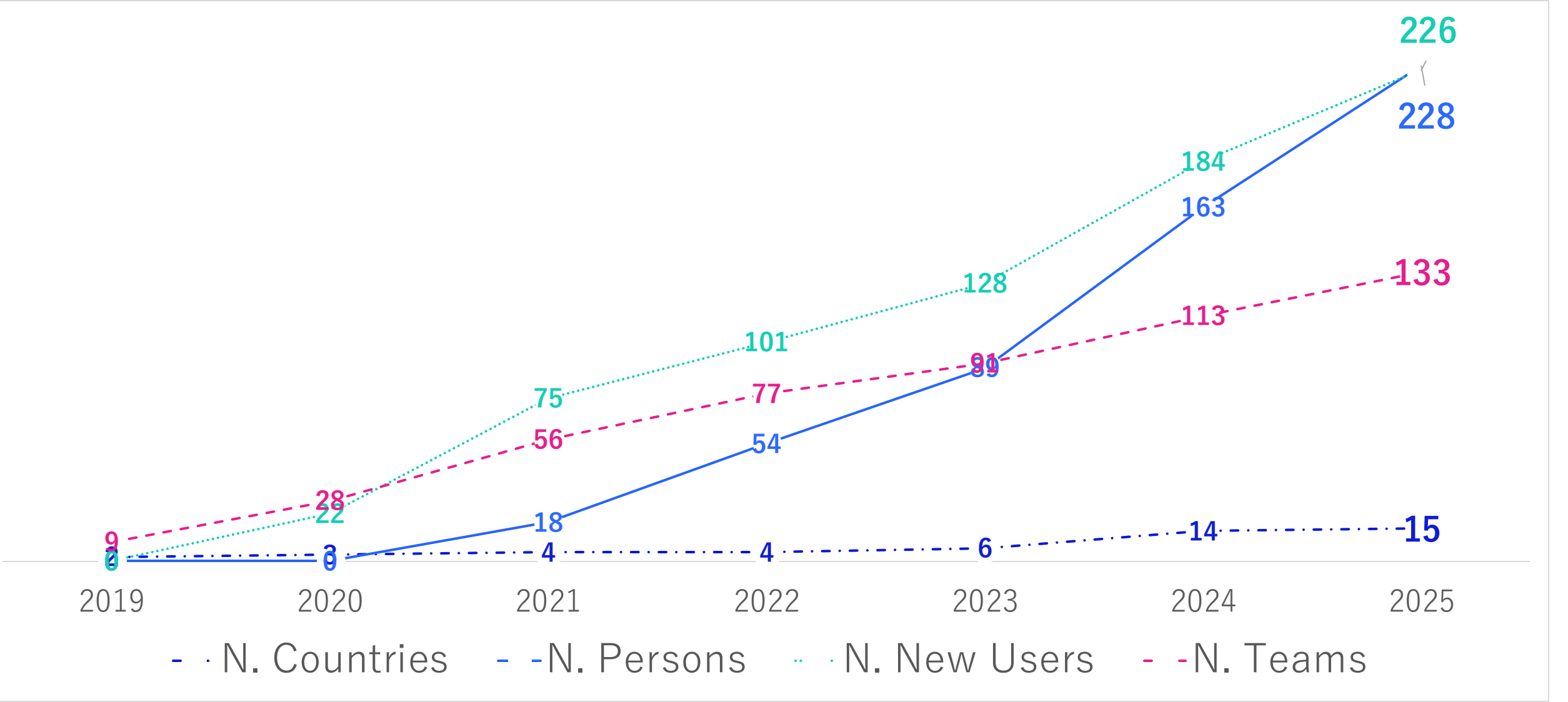
- Delivery is always today
- N. intermediate products: 1
- Perishable Products
- Tiny Price Range
- Small Quantity Range
- Profit is defined per step.
 - A greedy ufun is known
- Concurrent Negotiation
 - Long term planning

Standard

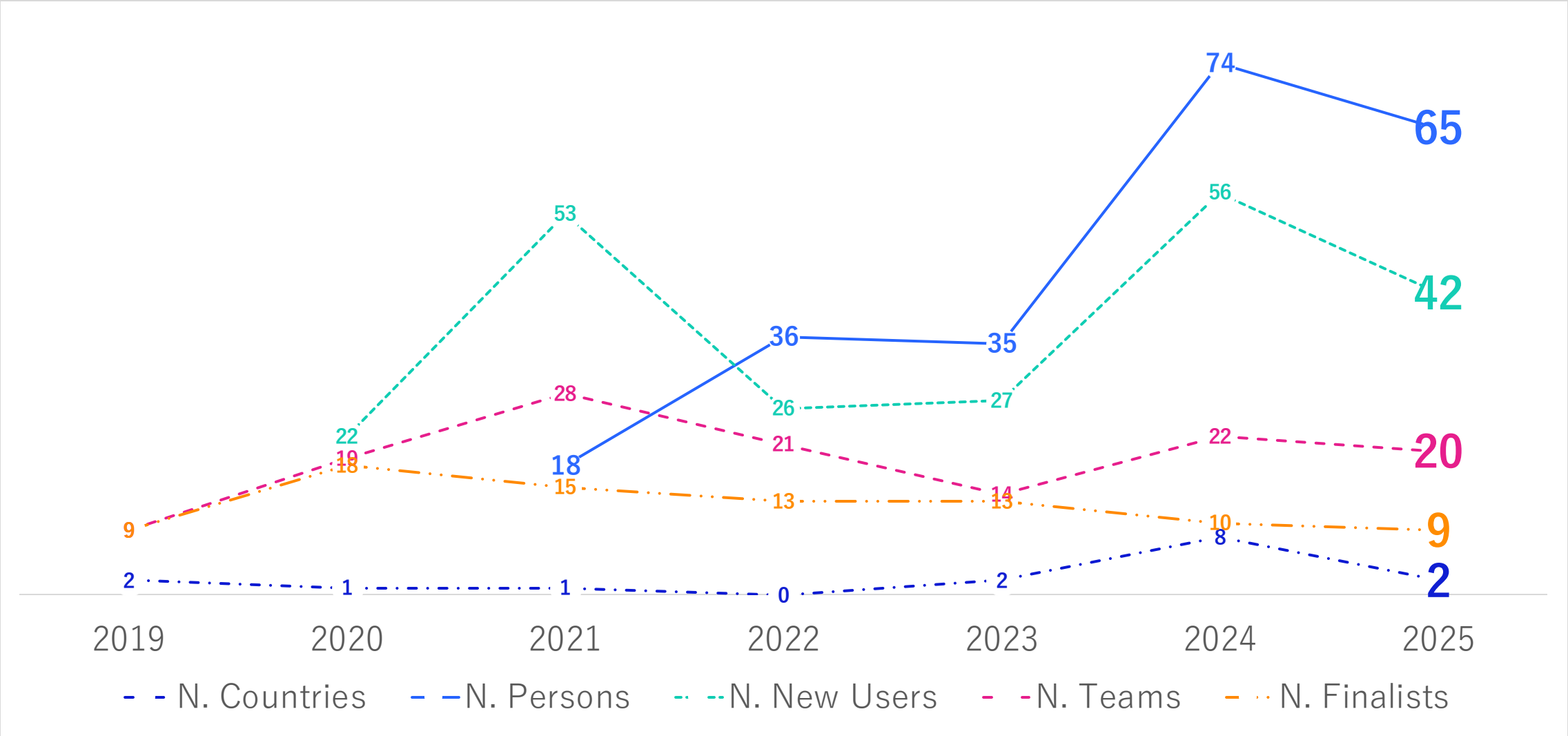


- Delivery time is negotiable
- N. Intermediate products: 3
- Accumulated Inventory
- Large Price Range
- Large Quantity Range
- Profit is known only ex-post
 - No greedy ufun
- Long term Planning
 - Concurrent negotiation

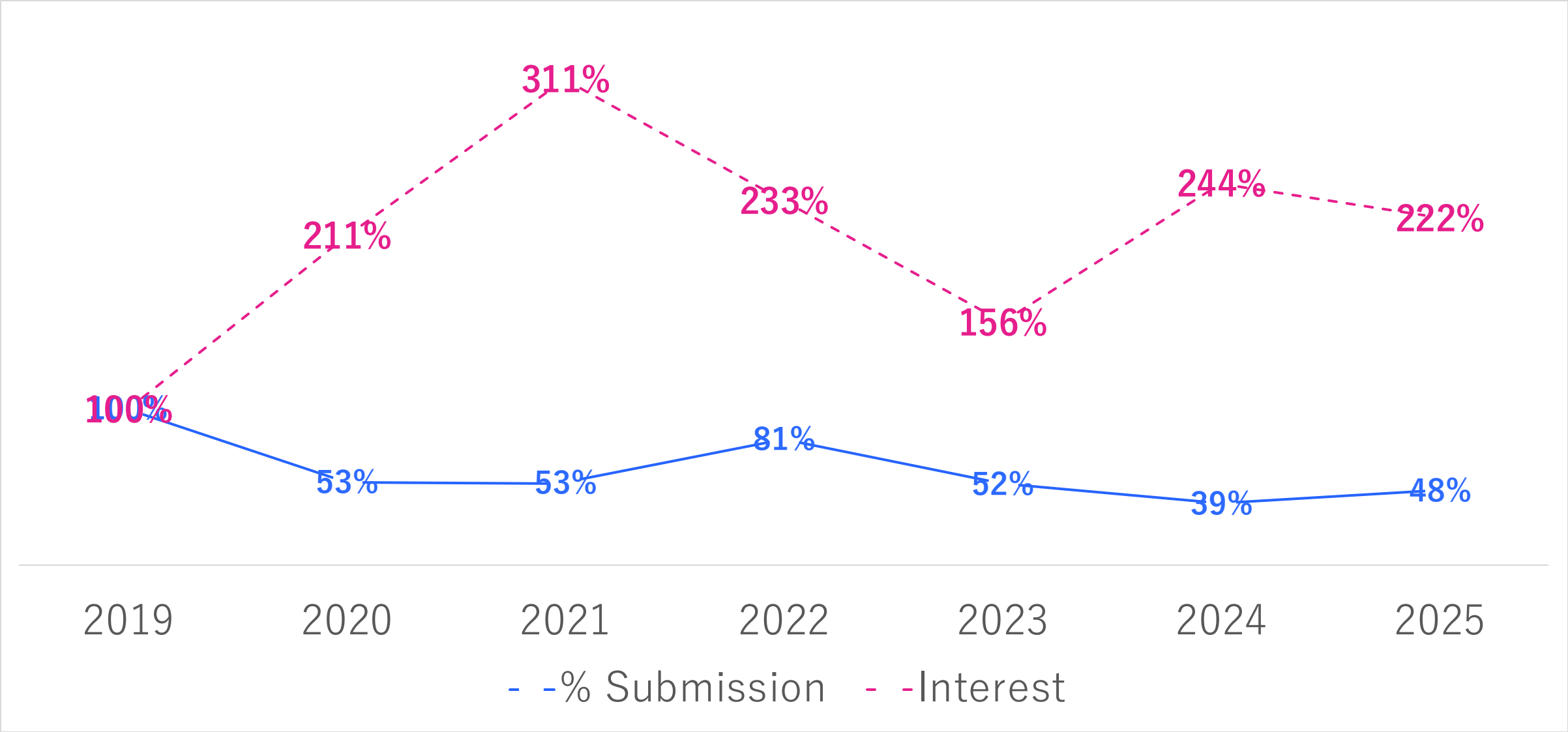
SCML Growth

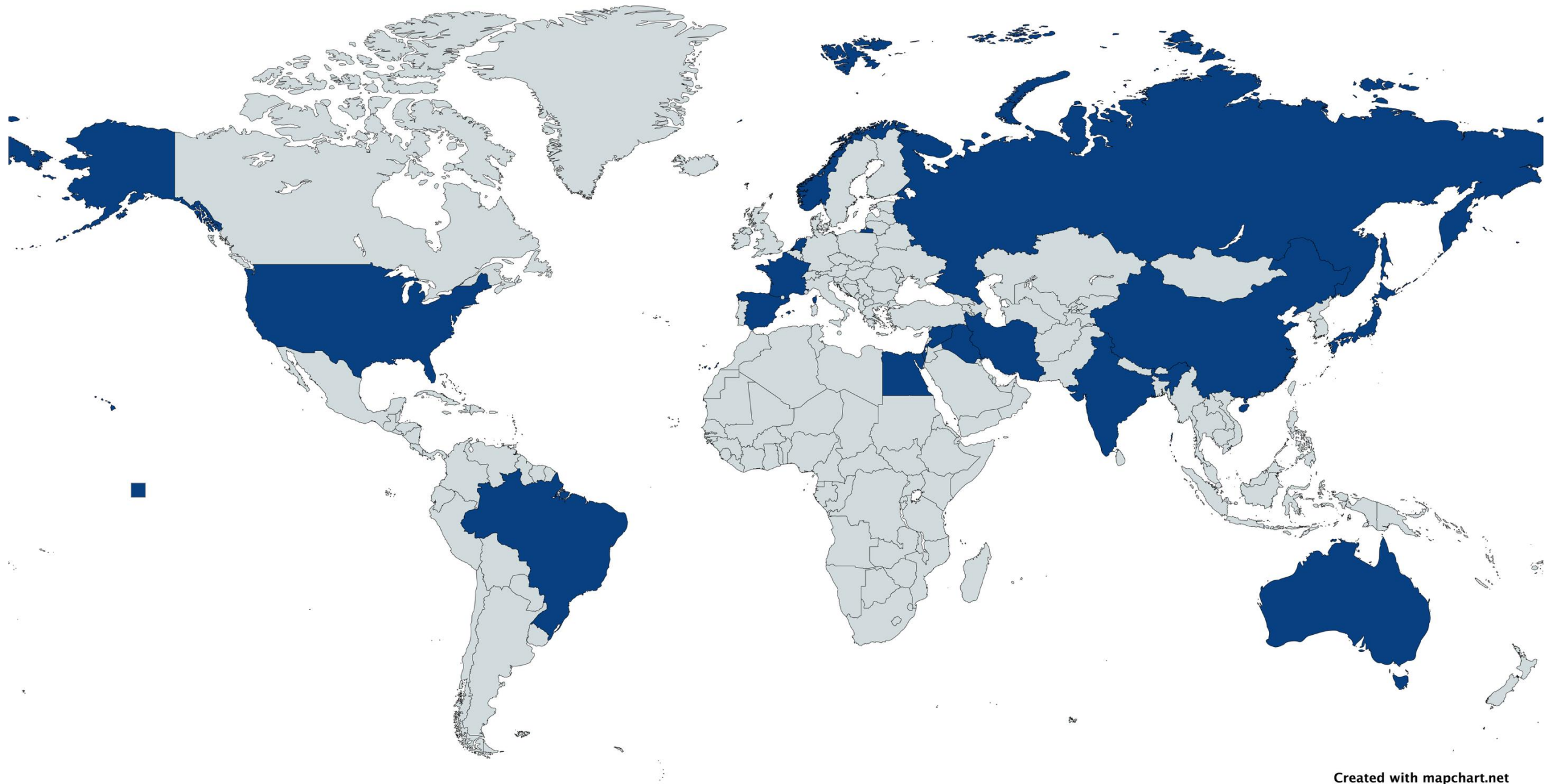


SCML Growth



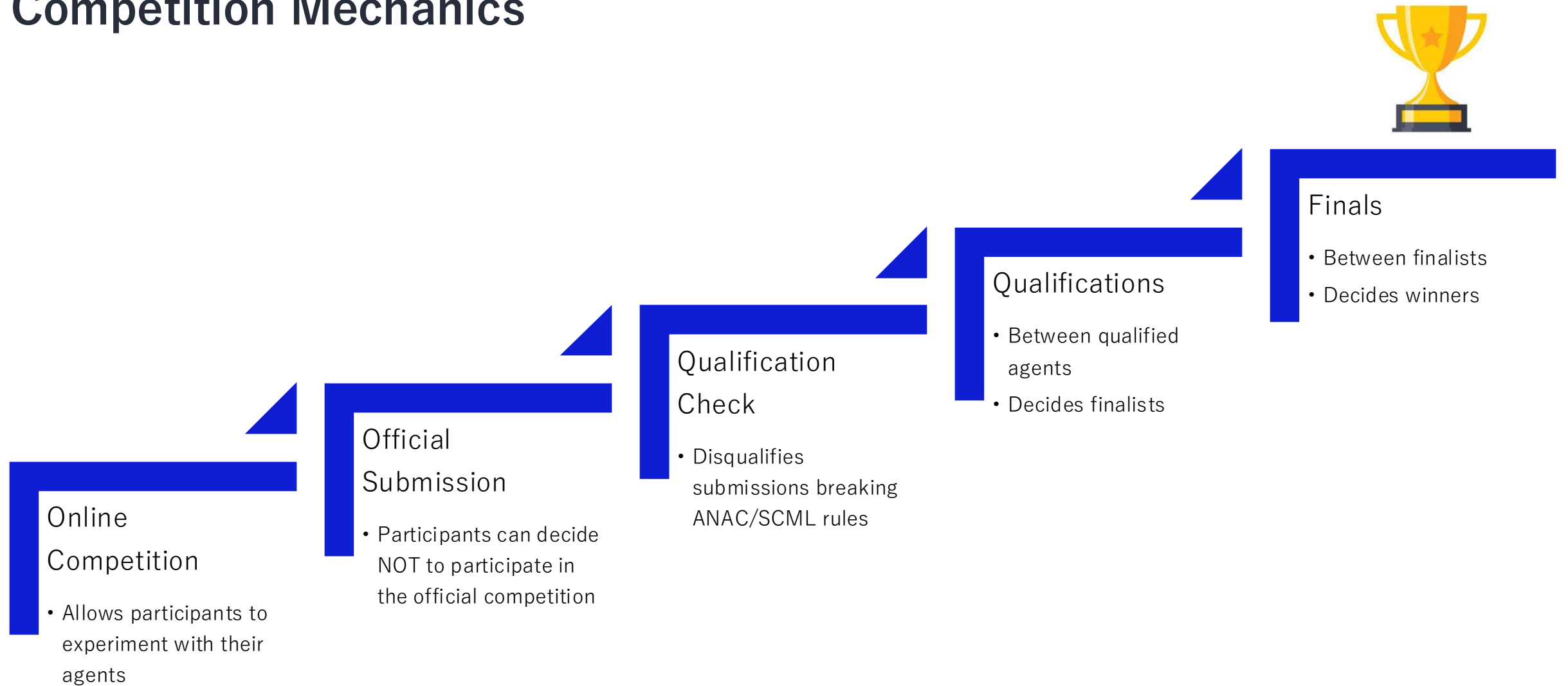
Estimat of Interest





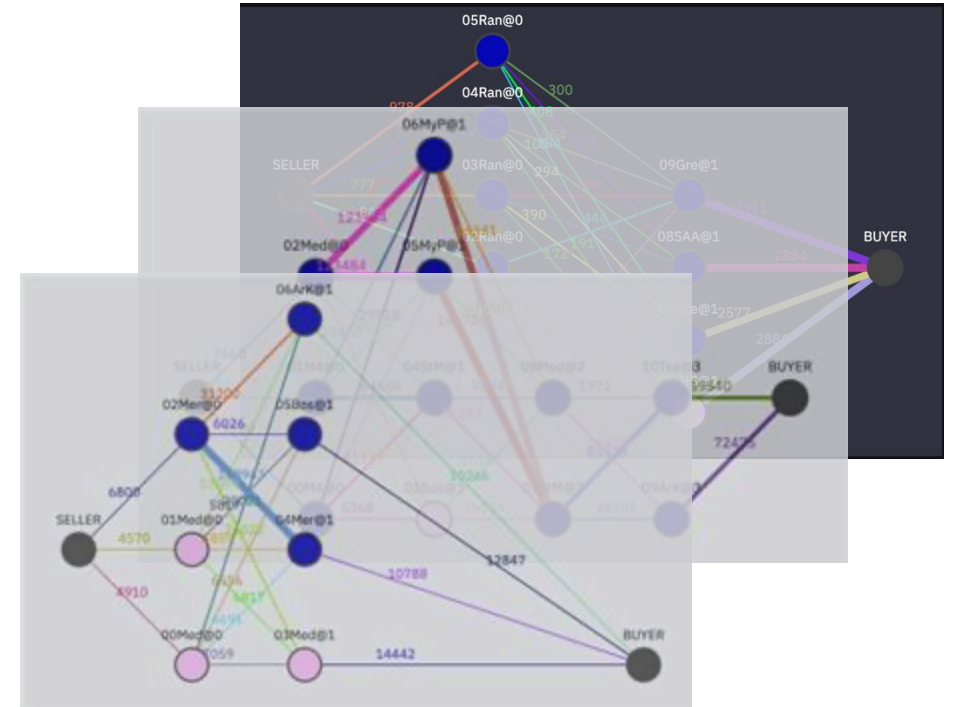
How did we run SCML?

Competition Mechanics



Tournament Procedure

- Given **K types** [agent = type = class]
 - **N Configs** are generated.
 - Specifies all world parameters up to the class of one set of factory managers
 - **NK Simulations** are run:
 - Every agent is run in each configuration.
 - Scores of all agent instances in each world are **averaged** giving the **agent score in that world**
 - The score of the agent = **asymmetrical truncated mean**
 - *Highest 5% of the scores in the top quadrant are removed*
 - *Risk averse → penalizes occasional negative scores*
- *The same winners result from using the median, mean, and truncated mean.*



Online Competition

SCML 2025 Online Competition

<https://scml.cs.brown.edu/scml>

■ 2 Tracks

■ 19 New registrations (56 in 2024)

■ 65 New agents uploaded (77 in 2024)

■ Tournaments Run:

- Oneshot: 124 (113 in 2024)
- Standard: 161 (101 in 2024)

■ This year:

- More teams **returned** back
- More tested **agents** from every team
- More **balanced** interest in OneShot and Standard

The screenshot displays the SCML 2025 website interface. At the top, there's a navigation bar with the NEC logo, 'ANAC ANL SCML Leader Board', and a 'Login Toggle Dark' option. The main heading is 'SCML 2025', followed by the subtitle 'Part of the ANAC 2025 Competition @ IJCAI 2025, Montreal, Canada'. Two green banners indicate that 'AGENT SUBMISSION IS NOT OPEN YET' and 'REPORT SUBMISSION IS NOT OPEN YET'. A 'NEWS' section lists updates: the submission deadline extension to June 10th, the release of the CFP, the availability of 2024 agents in the scml-agents package, and the release of 2024 results. A 'Getting started and getting help' section provides a 6-step guide for new participants. On the right, a 'Links' sidebar contains categories like CFP, TUTORIALS, VIDEO TUTORIALS, DOCS, FAQ, and DESCRIPTION, with sub-links for ONESHOT and STD. Below this, it lists templates for ONESHOT (CLASSIC, RL) and STANDARD (CLASSIC), along with discussion links for STD and ONESHOT. Source code links for SCML, NEGMAS, SCML VISUALIZER, and SCML AGENTS are also provided. The 'Important Dates (GMT)' table lists key events from June 8th to August 16th, 2025. Finally, the 'Statistics (2025)' section shows 19 new teams and 33 oneshot uploads.

NEC ANAC ANL SCML Leader Board Login Toggle Dark

SCML 2025

Part of the ANAC 2025 Competition @ IJCAI 2025, Montreal, Canada

AGENT SUBMISSION IS NOT OPEN YET

REPORT SUBMISSION IS NOT OPEN YET

NEWS

- May 30th, 2025 Submission deadline was extended to June 10th.
- March 18th, 2025 The CFP is out
- May 20th, 2024 Agents submitted to SCML 2024 are now available in the scml-agents package (v0.4.9). You can install them using "pip install scml-agents". For more information, check the source code at [GitHub](#)
- May 19th, 2024 The results of SCML 2024 are now available [here](#)

Getting started and getting help

1. The first thing you need to do is to read the game overview for the track you plan to submit to. You can check this year's rules for [the one shot track](#) and/or [the standard track](#).
2. If you are not registered here, do so to receive updates and be able to submit your agents later [here](#).
3. After deciding which track(s) to participate in, check their detailed description ([OneShot](#) or [Standard](#)).
4. Next, Check the [tutorials](#). You can find [video tutorials](#) and consult the [documentation](#) and we are happy to see you joining the [discussions](#).
5. Next, Download the appropriate skeleton (OneShot [Classic](#), [RL](#) or Standard [Classic](#)) and test it. You will find a full description on how to do that in the README as well as the docstring on top of myagent.py in the skeleton.
6. Happy hacking :-)) If you have any questions, bug reports, feature requests, etc, you can open an issue on the [SCML GitHub page](#)

Links

CFP

TUTORIALS

VIDEO TUTORIALS

DOCS

FAQ

DESCRIPTION:

[ONESHOT](#) [STD](#)

TEMPLATES (ONESHOT):

[CLASSIC](#) [RL](#)

TEMPLATES (STANDARD):

[CLASSIC](#)

DISCUSSIONS:

[STD](#) [ONESHOT](#)

SOURCE CODE:

[SCML \(GITHUB\)](#)

[NEGMAS \(GITHUB\)](#)

[SCML VISUALIZER \(GITHUB\)](#)

[SCML AGENTS \(GITHUB\)](#)

Important Dates (GMT)

Preliminary Submission	June 8th, 2025
Final Submission	June 10th, 2025
Report Submission	June 13th, 2025
Finalist Announcement	July 1st, 2025
Travel Support	TBD
Winner Announcement	August 16th, 2025

Statistics (2025)

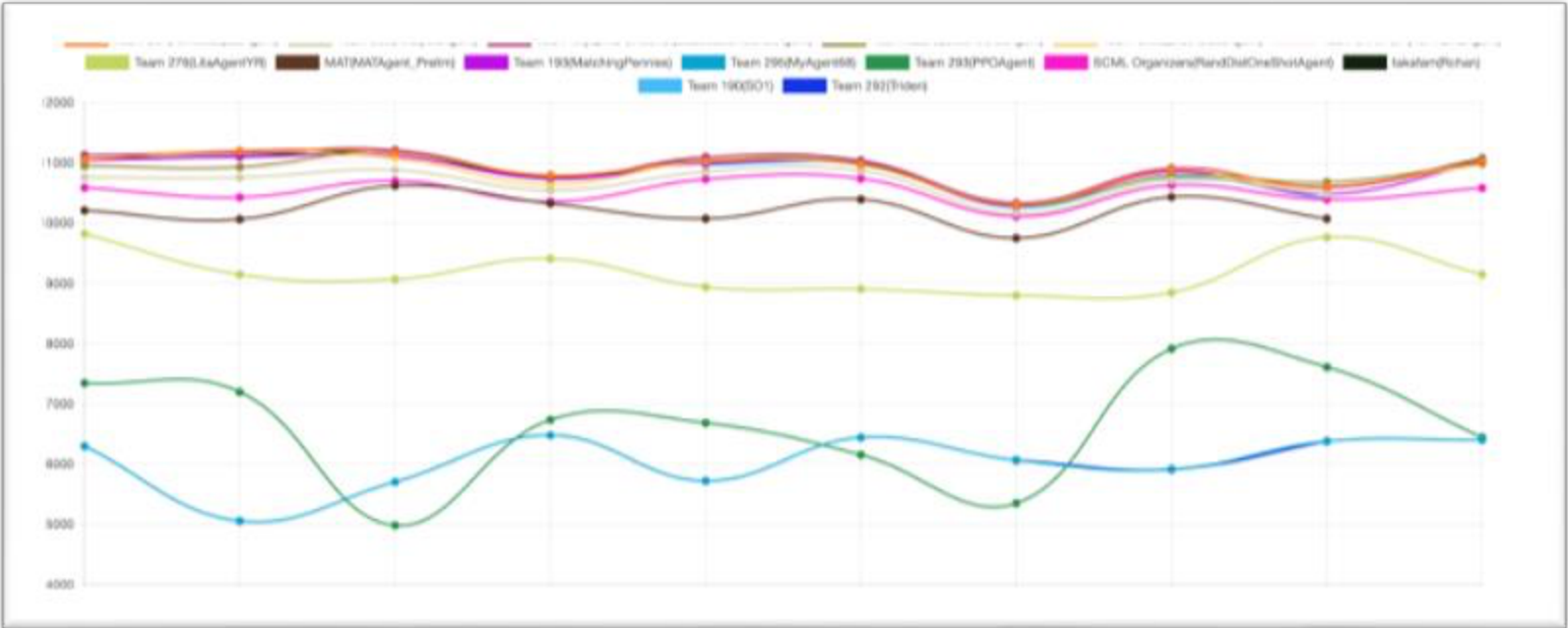
[NEW TEAMS](#) : 19

[ONESHOT UPLOADS](#) : 33

SCML-OneShot Online Competition

<https://scml.cs.brown.edu/leaderboard>

- 21 Different Agents (19 in 2024)
- 11 Submitted to the official competition (14 in 2024)
- 124 tournaments (113 in 2024)
 - Between 10 min and 7 hours per tournament



#	Agent	Score
1	Rchan	11,069
2	AlmostEqualAgent	11,047
3	CautiousOneShotAgent	11,036
4	MatchingPennies	11,005
5	CostAverseAgent	11,002
6	DistRedistAgent	10,971
7	HoriYamaAgent	10,969
8	RandDistOneShotAgent	10,582
9	LitaAgentYR	9,149
10	PPOAgent	6,442
11	MvAgent6R	6,402

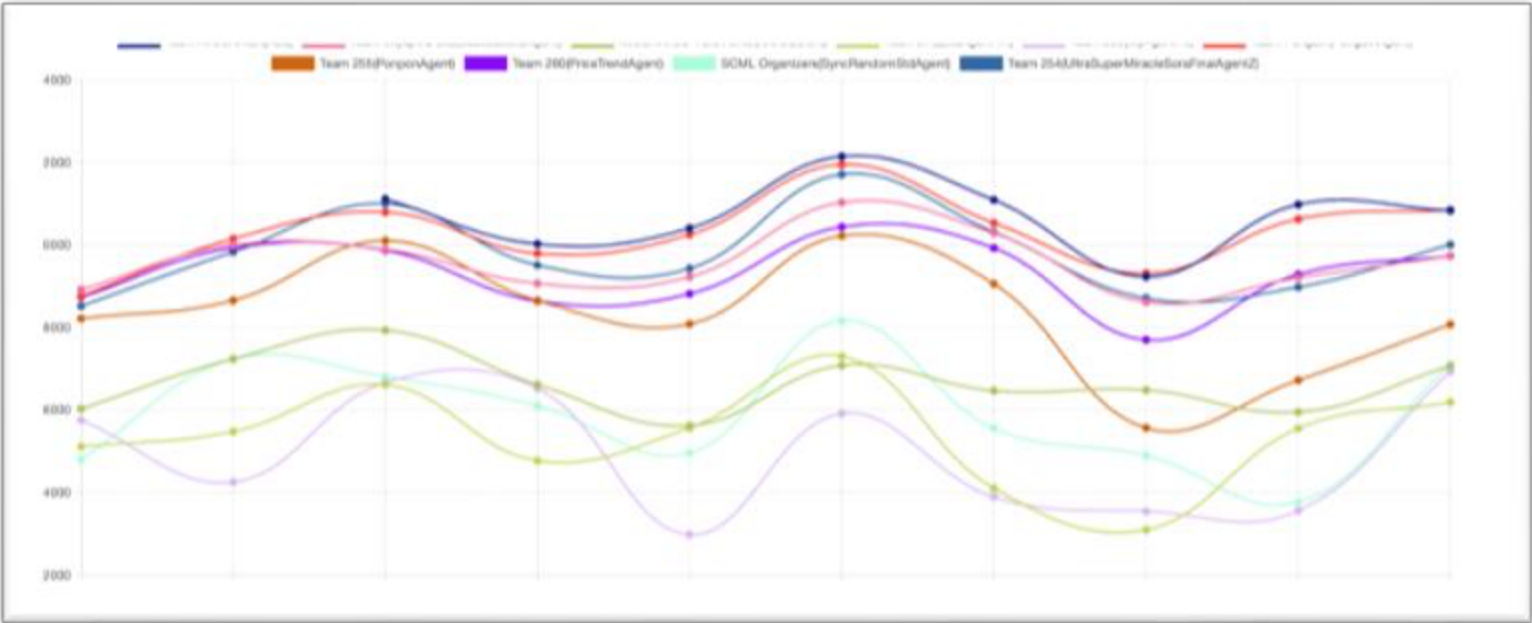
Agent Qualified to the Official Competition

Agent	Team Leader	Institute	Country	Team Name
Rchan	Takayama	TUAT	Japan	takafam
PPOAgent	Shoma Mizuno	NIT	Japan	Team 293
LitaAgentYS	YIHENG TANG	Kyoto University	Japan	Team 276
AlmostEqualAgent	Takano Rikuto	NIT	Japan	Team 284
AnalysisAgent	Eito Sugita	NIT	Japan	Team 283
HoriYamaAgent	Hayaki Horinouchi	Kyoto University	Japan	Team STAR UP
MATAgent_Prelim	Tyrone Serapio	Brown University	USA	MAT
MyAgent29	Hajime Endo	TUAT	Japan	Team Ukku
MyAgent56	Yuzuru Kitamura	TUAT	Japan	TeamYuzuru
CautiousOneShotAgent	Ryoga Miyajima	TUAT	Japan	Team Miyajima
MatchingPennies	Akash Singirikonda	Brown University	USA	Team 193

SCML-Standard Online Competition

<https://scml.cs.brown.edu/leaderboard>

- 19 Different Agents (13 in 2024)
- 9 Submitted to the official competition (9 in 2024)
- 161 tournaments (101 in 2024)
 - Between 10 min and 7 hours per tournament



#	Agent	Score
1	PenguinAgent	10,847
2	AS0	10,835
3	UltraSuperMiracleSoraFinalAgentZ	10,004
4	PriceTrendAgent	9,735
5	CautiousStdAgent	9,732
6	PonponAgent	8,072
7	SyncRandomStdAgent	7,107
8	KATSUDON	7,068
9	MyAgent19	6,930
10	LitaAgentYR	6,185

Agent Qualified to the Official Competition

Agent	Team Leader	Institute	Country	Team Name
AS0	Atsunaga Sadahiro	TUAT	Japan	Team ATSUNAGA
PriceTrendAgent	Kawasaki Yuta	NIT	Japan	Team 280
PonponAgent	Kento Fukuda	NIT	Japan	Team 255
UltraSuperMiracleSoraFinalAgentZ	Sora Nishizaki	NIT	Japan	Team 254
XenoSotaAgent	Sota Sakaguchi	NIT	Japan	SotaWorks
KATSUDON	Yamadori Kohki	NIT	Japan	MISOKATSU-TEISYOKU
LitaAgentYR	YIHENG TANG	Kyoto University	Japan	Team 276
Penguin Agent	GouKazusa	NIT	Japan	Team Penguin
CautiousStdAgent	Ryoga Miyajima	TUAT	Japan	Team Miyajima

Tournament Mechanics

Tournament Mechanics

■ Qualifications Round

Determines the [finalists](#)

- **Admission conditions:**

- Submitted by the deadline
- Submitted a report describing the strategy
- Having a non-trivial strategy

- **Progression conditions:**

- Work as well as one of the **top 2** agents from last year.
 - We used to require beating previous year's winner
- Be in the top 50% of the agents

■ Finals Round

Determines the [winners](#)

- **Admission conditions:**

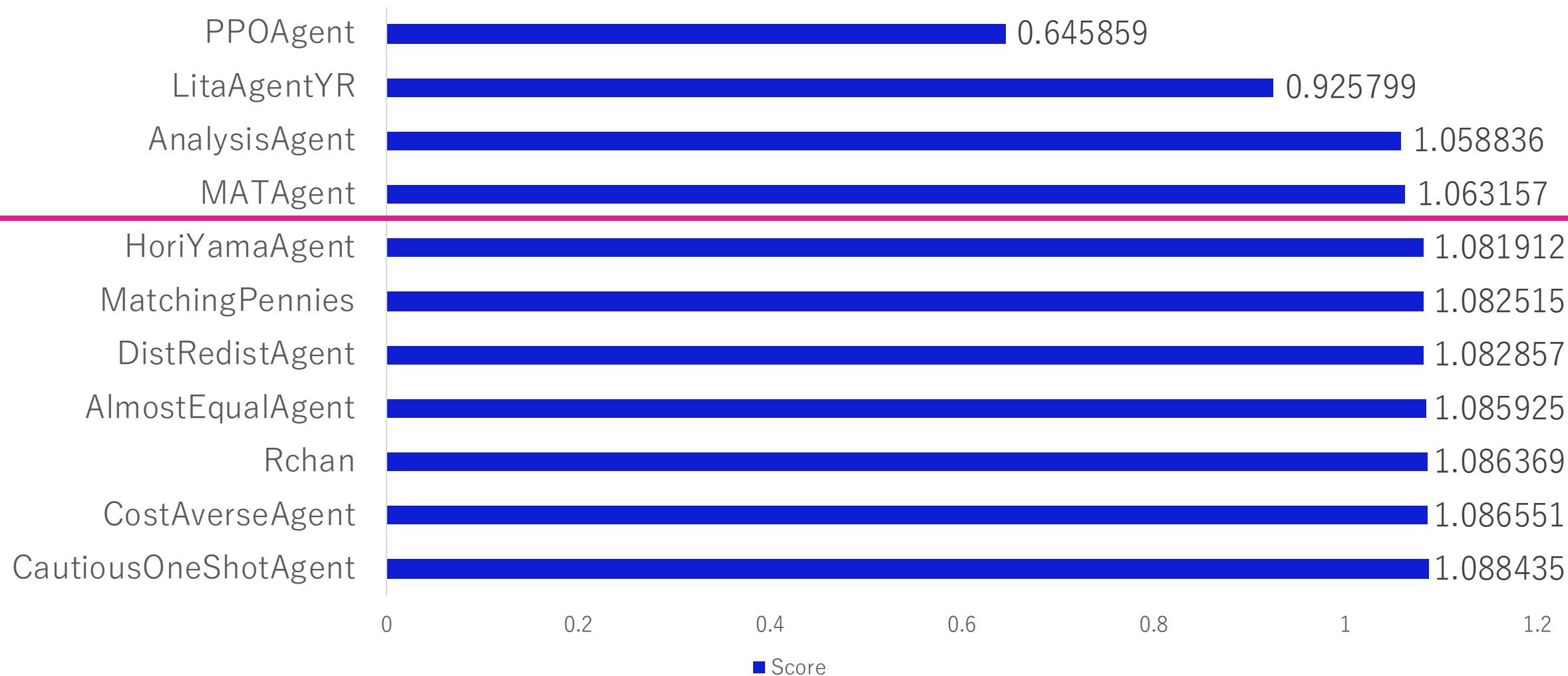
- Passer the qualifications round

- **Progression conditions:**

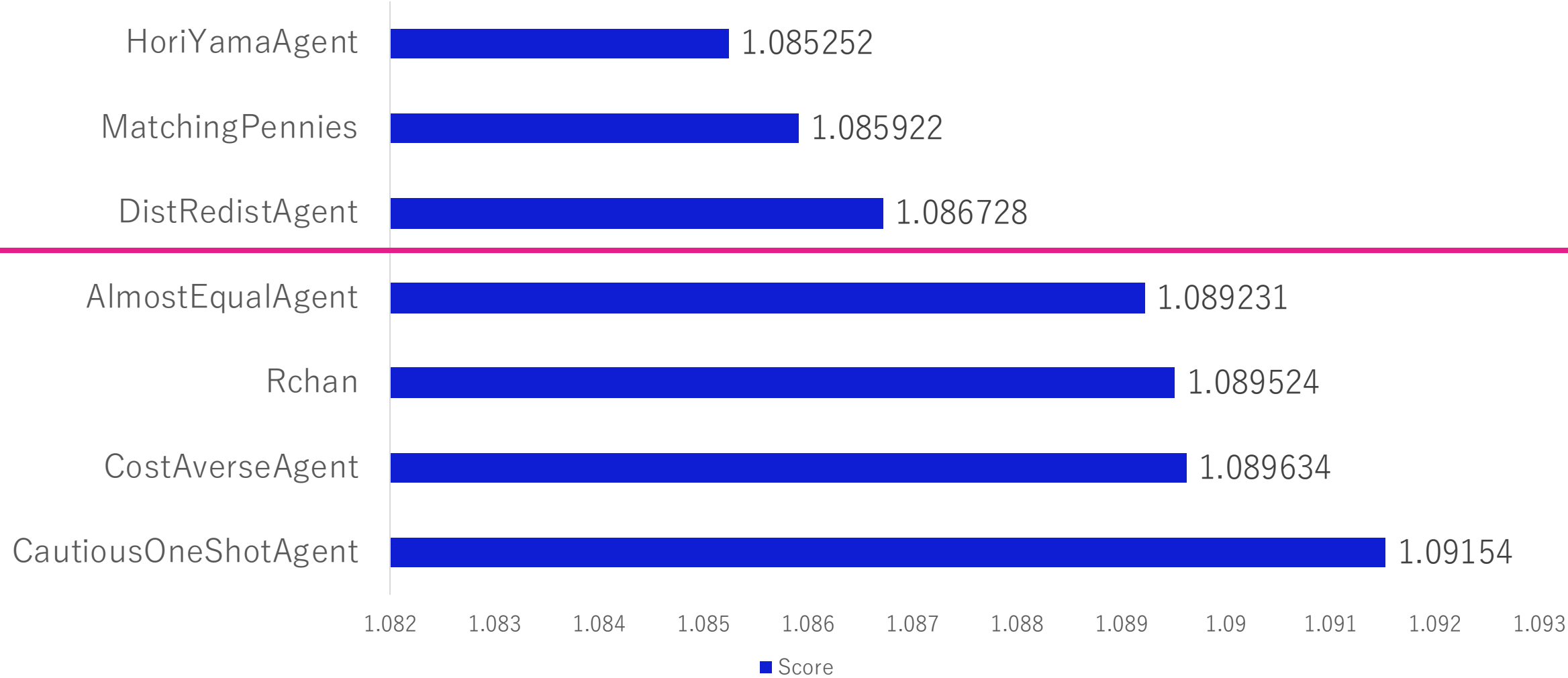
- Work as well as one of the **top 2** agents from last year.
 - We used to require beating previous year's winner
- Be in the top 50% of the agents

SCML OneShot Rresult

SCML-OneShot Qualifications



SCML-OneShot Qualifications





Yuzuru Kitamura



300€

Shota Takayama



300€

**WINNER OF THE AUTOMATED NEGOTIATING
AGENTS COMPETITION 2025**

~SUPPLY CHAIN MANAGEMENT LEAGUE~

(ONE SHOT)

THIS CERTIFICATE IS AWARDED TO

SHOTA TAKAYAMA

TOKYO UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

TO HONOR THEIR EXCELLENT NEGOTIATION STRATEGY

RCHAN AGENT

YASSER MOHAMMAD

AMY GREENWALD

MARK KLEIN

SHINJI NAKADAI

SATOSHI MORINAGA

REYHAN AYDOGAN

KATSUHIDE FUJITA

TIM BAARSLAG

CATHOLIJN JONKER

SPONSORED BY



NEC-AIST
AI Cooperative
Research Laboratory





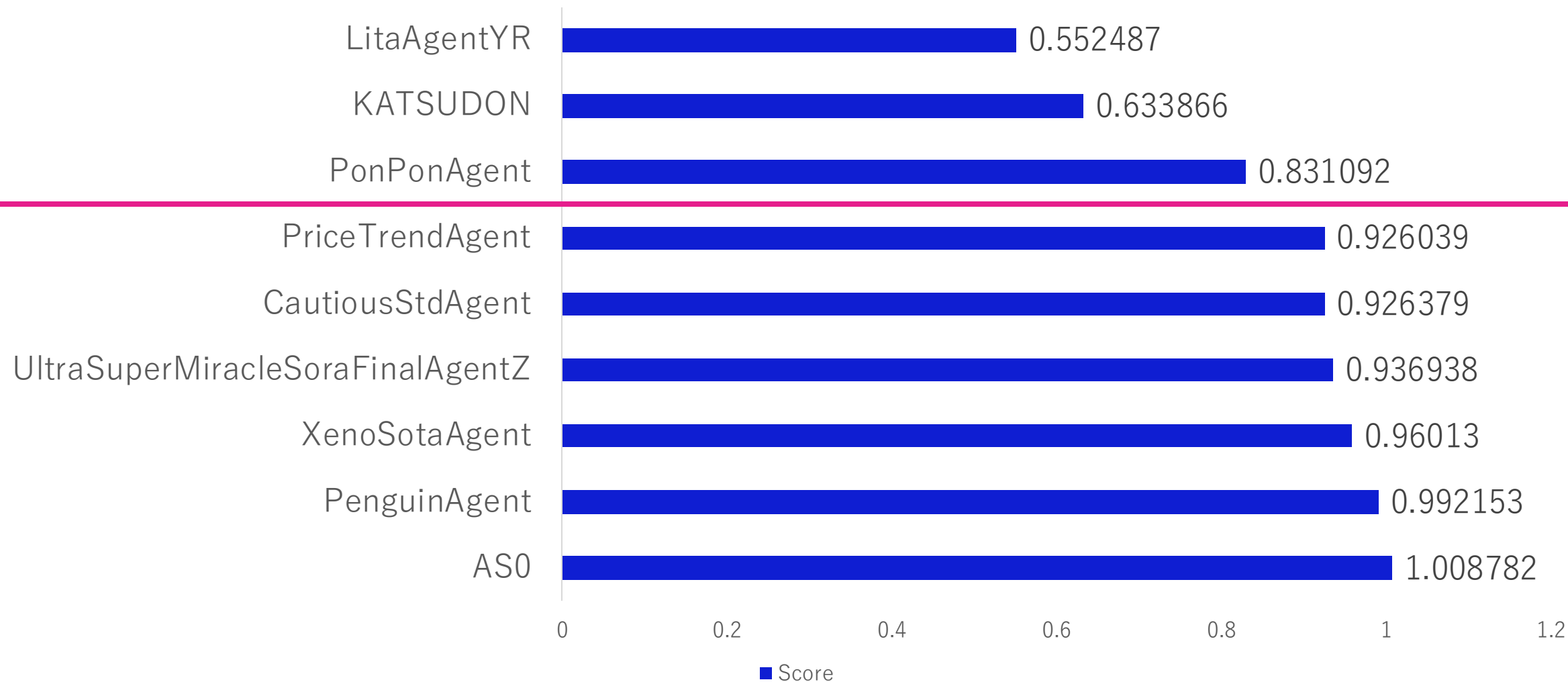
Rikuto Takano
Takeaki Sakabe



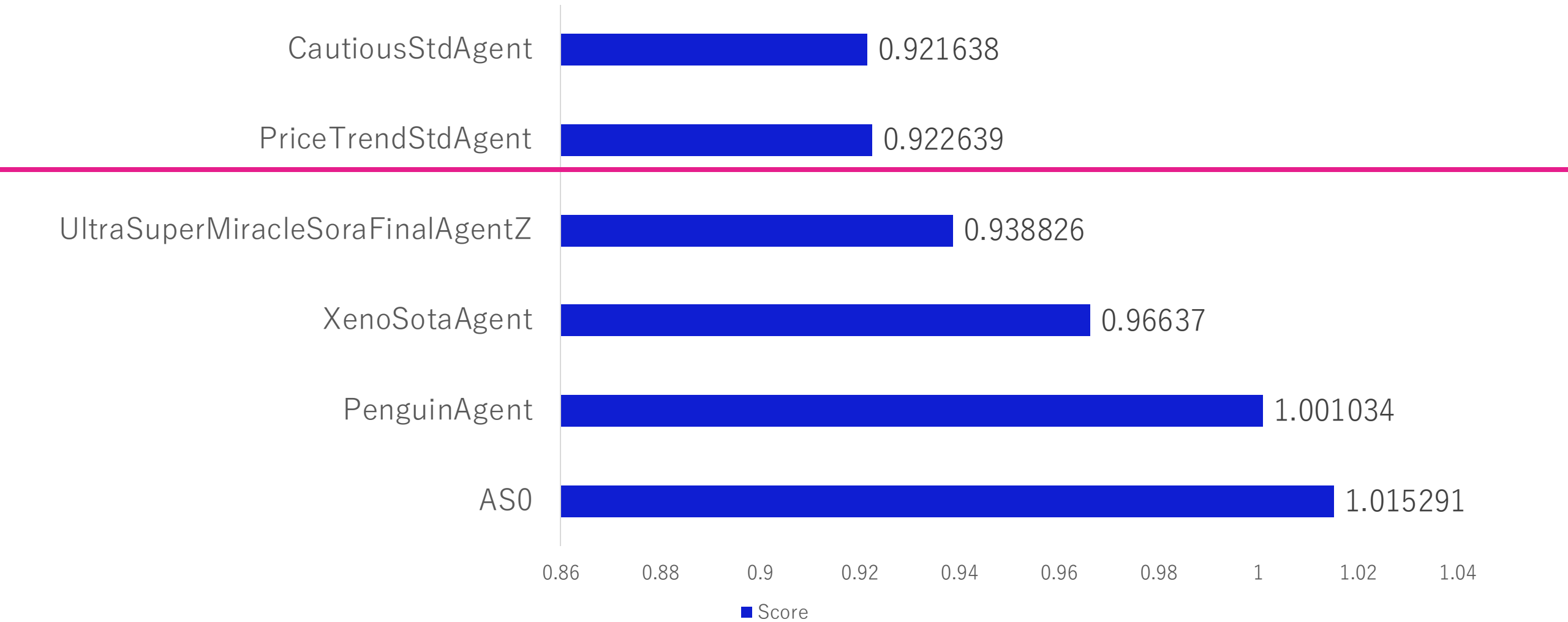
300€

SCML Standard Results

SCML-OneShot Qualifications



SCML-OneShot Qualifications



Atsunaga Sadahiro



500€



Sota Sakaguchi
Takanobu Otsuka



300€

**SECOND PLACE OF THE AUTOMATED NEGOTIATING
AGENTS COMPETITION 2025**

~SUPPLY CHAIN MANAGEMENT LEAGUE~

(STANDARD)

THIS CERTIFICATE IS AWARDED TO

SOTA SAKAGUCHI
NAGOYA INSTITUTE OF TECHNOLOGY, JAPAN

TO HONOR THEIR EXCELLENT NEGOTIATION STRATEGY

XENOSOTA AGENT

YASSER MOHAMMAD AMY GREENWALD MARK KLEIN SHINJI NAKADAI SATOSHI MORINAGA

REYHAN AYDOGAN KATSUhide FUJITA TIM BAARSLAG CATHOLIJN JONKER

SPONSORED BY



NEC-AIST
AI Cooperative
Research Laboratory





Sora Nishizaki
Takanobu Otsuka



200€

Winner Presentations

Shota Takayama



300€



Atsunaga Sadahiro



500€



NEC

\Orchestrating a brighter world