



PROGRAMME

**THE 22ND WORLD COMPUTER CHESS
CHAMPIONSHIP**

THE 19TH COMPUTER OLYMPIAD

LEIDEN - JUNE 27 – JULY 3, 2016
Leiden University

Leiden
The Netherlands



Organised by:
International Computer Games Association (ICGA)
Leiden Institute of Advanced Computer Science (LIACS)
Leiden Centre of Data Science (LCDS)

List of Sponsors

Museum Naturalis
Digital Games Technology
Faculty of Science
ICGA
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LIACS, Leiden University
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Leiden



ORGANISATION

Organising Committee

Johanna Hellemons (Chair)

H.Jaap van den Herik

Walter Kusters

Aske Plaat

Tournament Director

WCCC: J. Krabbenbos

WCSC: J. Krabbenbos

Computer Olympiad: H.J. van den Herik

Assistant Tournament Director

WCCC: H.J. van den Herik

WCSC: H.J. van den Herik

Computer Olympiad:

- Go: Hideki Kato: playing schedules
- Mini-Shogi: Harm Geert Muller
- Draughts: Leo Nagels
- EinStein Würfelt Nicht Ingo Althöfer
- Hex: Ryan Hayward
- Other Games: Aske Plaat and H.Jaap van den Herik

WELCOME

It is our pleasure to welcome you to the 22nd World Computer-Chess Championship and the 19th Computer Olympiad to be held at Leiden University in Leiden, the Netherlands. The events take place from June 27 to July 3, 2016 and are held under the auspices of the ICGA (International Computer Games Association).

We are happy to offer you an exciting computer-chess championship in which the strongest chess programs of the world participate. In the Computer Games Tournaments more than 100 programs participate, distributed over 26 games.

The participants of the events come from Asia, Europe, and North-America.

We are grateful for the support by *Museum Naturalis, Digital Games Technology, Faculty of Science, Google Research, ICGA, ISSC, LIACS, LCDS, Municipality of Leiden, NWO Exact Sciences, and SURF SARA*. They have made the events possible.

Finally, we would like to wish all attendees an exciting World Computer-Chess Championship and Computer Olympiad. We hope that the participants will stimulate each other to develop numerous ideas for future scientific research.

Professor H.Jaap van den Herik
Professor Aske Plaat
Dr. Walter Kusters
Mrs. Johanna Hellemons

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Participants of
the 19th Olympiad
Special events

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25

OUTLINE OF THE 2016 PROGRAMME

| Date | | 22 nd WCCC Turing Room | 19 th Computer Olympiad Room 302+304 | WCSC 2016 Turing Room |
|----------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Monday June 27 | 10.00 h | Opening Ceremony 10.00 h Players meeting 12-16 h Round 1 WCCC 17-21 h Round 2 WCCC | Opening Ceremony 11.00 Players meeting 12-19 h Games | |
| Tuesday June 28 | 09-13 h 14-18 h | 09-13 h Round 3 WCCC 14-18 h Round 4 WCCC 19-22 h Speed Chess | 10-21 h Games | |
| Wednesday June 29 | 09.00-13.00 h 14.00-18.00 h 14-16 h * | 09-13 h Round 5 WCCC 14-18 h Round 6 WCCC Lecture on Alpha Go Gorlaeus building | 13 h Games Lecture on Alpha Go Gorlaeus building | |
| Thursday June 30 | 09-13 h 14-18 h | 09-13 h Round 7 WCCC 14-18 h Round 8 WCCC 19.00 h Museum visit and Dinner at Museum Naturalis | 13 h Games 19.00 h Museum visit and Dinner at Museum Naturalis | 19.00 h Museum visit and Dinner at Museum Naturalis |
| Friday July 1 | 09-13 h 13.30-14.30 h | 09-13 h Round 9 WCCC 14-18 h Playoffs Two lectures room 174 | 13 h Games Two lectures room 174 | |
| Saturday July 2 | 09-13 h 14-18 h | | 10-18 h Games Draught tournament | 09-11 h Round 1 12-14 h Round 2 15-17 h Round 3 18-20 h Round 4 |
| Sunday July 3 | 9-13 17.00 h or later | | 10-18 h Games Draughts tournament | 09-11 h Round 5 12-14 h Round 6 15-17 h Round 7 |

* Public lecture at Gorlaeus Building (see p. 27).

PARTICIPANTS WCCC 2016 and WCSC TOURNAMENT

WCCC 2016

| Program | Author(s) | Email address |
|----------------|---------------------|--------------------------|
| GRIDGINKGO | Kai Himstedt | kai.himstedt@gmx.de |
| HIARCS | Mark Uniacke | mark@thinkchess.co.uk |
| JONNY | Johannes Zwanzger | johannes.zwanzger@gmx.de |
| KOMODO | Mark Lefler | mjllef@hotmail.com |
| RAPTOR | Steve Webber | steve.k.webber@gmail.com |
| SHREDDER | Stefan Meyer-Kahlen | info@shredderchess.com |

WCSC 2016

| Program | Author(s) | Email address |
|----------------|---------------------|--------------------------|
| GINKGO | Frank Schneider | hobblefrank@t-online.de |
| HIARCS | Mark Uniacke | mark@thinkchess.co.uk |
| JONNY | Johannes Zwanzger | johannes.zwanzger@gmx.de |
| KOMODO | Mark Lefler | mjllef@hotmail.com |
| RAPTOR | Steve Webber | steve.k.webber@gmail.com |
| SHREDDER | Stefan Meyer-Kahlen | info@shredderchess.com |
| THE BARON | Richard Pijl | richard.pijl@telenet.be |

TOURNAMENT TABLE WCCC 2016

| | Program | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | Tot | Place |
|---|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------------|
| 1 | GRIDGINKGO | X | X | | | | | | | | | | | | |
| 2 | HIARCS | | | X | X | | | | | | | | | | |
| 3 | JONNY | | | | | X | X | | | | | | | | |
| 4 | KOMODO | | | | | | | X | X | | | | | | |
| 5 | RAPTOR | | | | | | | | | X | X | | | | |
| 6 | SHREDDER | | | | | | | | | | | X | X | | |

PROGRESS TABLE WCCC 2016

| | Score after round | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total | Place |
|---|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|--------------|--------------|
| 1 | GRIDGINKGO | | | | | | | | | | | | |
| 2 | HIARCS | | | | | | | | | | | | |
| 3 | JONNY | | | | | | | | | | | | |
| 4 | KOMODO | | | | | | | | | | | | |
| 5 | RAPTOR | | | | | | | | | | | | |
| 6 | SHREDDER | | | | | | | | | | | | |

Please note, the tables are for supportive use only. The drawing of lots takes place on June 27, 2016, at the Players Meeting. Then we also distribute the pairings over the rounds.

TOURNAMENT TABLE WCSC 2016

| | Program | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Tot | Place |
|---|----------------|----------|----------|----------|----------|----------|----------|----------|------------|--------------|
| 1 | GINKGO | X | | | | | | | | |
| 2 | HIARCS | | X | | | | | | | |
| 3 | JONNY | | | X | | | | | | |
| 4 | KOMODO | | | | X | | | | | |
| 5 | RAPTOR | | | | | X | | | | |
| 6 | SHREDDER | | | | | | X | | | |
| 7 | THE BARON | | | | | | | X | | |

PROGRESS TABLE WCSC 2016

| | Score after round | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Total | Place |
|---|------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|--------------|
| 1 | GINKGO | | | | | | | | | | |
| 2 | HIARCS | | | | | | | | | | |
| 3 | JONNY | | | | | | | | | | |
| 4 | KOMODO | | | | | | | | | | |
| 5 | RAPTOR | | | | | | | | | | |
| 6 | SHREDDER | | | | | | | | | | |
| 7 | THE BARON | | | | | | | | | | |

Please note, the tables are for supportive use only. The drawing of lots takes place on July 2, 2016, at the Players Meeting. Then we also distribute the pairings over the rounds.

SCHEDULE COMPUTER GAMES

| Amazons | | Double round robin | | ID | Program |
|----------------|-----------|--------------------|--|-----------|----------------|
| June 27 | 1200-1300 | | | 8QP | 8QP |
| Mon | 1300-1400 | | | inv | INVADER |
| | 1400-1500 | | | uns | UNSTOPPABLE |
| | 1500-1600 | | | X+ | X+ |
| | | | | | |
| | | | | | |
| | | | | | |
| June 28 | 1000-1100 | | | | |
| Tues | 1100-1200 | | | | |
| | 1200-1300 | | | | |
| | 1300-1400 | | | | |
| | 1400-1500 | Playoffs | | | |
| | | | | | |

| Backgammon | | | | ID | Program |
|-------------------|-----------|----------|--|-----------|----------------|
| June 29 | 1400-1500 | | | Eld | ELDER_HA |
| Wed | 1500-1600 | | | HQ | GNU BACKGAMMON |
| | 1600-1700 | | | shi | BGBLITZ |
| June 30 | 1400-1500 | | | | |
| Thurs | 1500-1600 | | | | |
| | 1600-1700 | | | | |
| July 1 | 1000-1100 | | | | |
| Fri | 1100-1200 | | | | |
| | 1200-1300 | | | | |
| | 1300-1400 | Playoffs | | | |

| Block Go | | | ID | Program |
|-----------------|-----------|----------|-----------|----------------|
| June 30 | 1400-1500 | | MM | MMGo |
| Thurs | 1500-1600 | | Ken | KENG |
| | 1600-1700 | | Right | RIGHTHAND |
| | 1700-1800 | | | |
| | 1800-1900 | | | |
| July 1 | 1400-1500 | | | |
| Fri | 1500-1600 | | | |
| | 1600-1700 | | | |
| | 1700-1800 | Playoffs | | |
| | | | | |

4x2 rounds

| Breakthrough | | | | ID | Program |
|---------------------|-----------|--|--|-----------|----------------|
| June 29 | 1600-1700 | | | chi | WANDERER |
| Wed | 1700-1800 | | | bob | BOB |
| | 1800-1900 | | | shi | DEEP NIKITA |
| | 1900-2000 | | | | |
| | | | | | |
| June 30 | 1400-1500 | | | | |
| Thurs | 1500-1600 | | | | |
| | 1600-1700 | | | | |
| | 1700-1800 | | | | |
| | | | | | |

| Chinese Chess | | 2x 4 rounds | | ID | Program |
|----------------------|-----------|-------------|--|-----------|----------------|
| June 27 | 1200-1300 | | | chi | CHIMO |
| Mon | 1300-1400 | | | HQ | HAQIKiD |
| | 1400-1500 | | | Xie | XIEXIEMASTER |
| | 1500-1600 | | | | |
| | | | | | |
| June 28 | 1000-1100 | | | | |
| Tues | 1100-1200 | | | | |
| | 1200-1300 | | | | |
| | 1300-1400 | | | | |
| | 1400-1500 | Playoffs | | | |

| Chinese Dark Chess | | | ID | Program |
|--------------------|-----------|----------|------|---------------------|
| June29 | 1200-1300 | | dan | DANCING |
| Wed | 1300-1400 | | NBDC | NEWBIEDARKCH ESS |
| | 1400-1500 | | yah | YAHARI |
| | 1500-1600 | | obs | OBSERVER |
| | 1600-1700 | | | |
| | 1700-1800 | | | |
| | 1800-1900 | Playoffs | | |
| | | | | |

| Clobber | | | ID | Program |
|---------|-----------|----------|------|---------|
| June 30 | 1400-1500 | | klop | KLOPPER |
| Thurs | 1500-1600 | | pan | PAN |
| | 1600-1700 | | | |
| | 1700-1800 | | | |
| | 1900 | dinner | | |
| July 1 | 1400-1500 | | | |
| Fri | 1500-1600 | | | |
| | 1600-1700 | | | |
| | 1700-1800 | | | |
| | 1800-1900 | Playoffs | | |

4x2 rounds

| Connect6 | | | ID | Program |
|----------|-----------|----------|-------|-------------------|
| June 30 | 1400-1500 | | float | FLOATING CLOUD |
| Thurs | 1500-1600 | | expl | EXPLORER |
| | 1600-1700 | | | |
| | 1700-1800 | | | |
| | 1900 | Dinner | | |
| July 1 | 1400-1500 | | | |
| Fri | 1500-1600 | | | |
| | 1600-1700 | | | |
| | 1700-1800 | Playoffs | | |
| | 1800-1900 | | | |

4 double rounds

| Dots and Boxes | | (4 double rounds) | ID | Program |
|-----------------------|-----------|-------------------|-----------|----------------|
| June 28 | 1000-1100 | | dots | DOTSOLE |
| Tues | 1100-1200 | | SH | THE SHARK |
| | 1200-1300 | | | |
| | 1300-1400 | | | |
| | 1400-1500 | | | |
| | 1500-1600 | | | |
| | 1600-1700 | | | |
| | 1700-1800 | Playoffs | | |

| Draughts | | 10x10 | | |
|-------------------------|-----------|--------------|-----------|----------------|
| Saturday and Sunday | | | ID | Program |
| Organised by Leo Nagels | | | SB | SJENDE BLYN |
| July 2 | 1000-1800 | | MobD | MOBY DAM |
| July 3 | 1000-1800 | | Tor | TORNADO |
| | | | bit | BIT.SAY |
| | | | Mac | MAXIMUS |
| | | | Cerb | CERBERUS |
| | | | Sc | SCAN |
| | | | Qi | QI2WIN |
| | | | Slz | SLAGZET.COM |
| | | | Tdk | TDKING |

| Ein Stein Würfelt Nicht | Organised by Ingo Althofer | | ID | Program |
|------------------------------------|-------------------------------|----------|-----------|----------------|
| June 27 | 1100-1200 | | dnik | DEEP NIKITA |
| June 28 | 1200-1300 | | emc | E-MC2 |
| June 29 | 1300-1400 | | han | HANFRIED |
| (June 30) | 1400-1500 | | vsw | VSWTN |
| | 1500-1600 | | kat | KATZE OHREN |
| | 1600-1700 | | plp | POINTLINEPLANE |
| | 1700-1800 | | pip | PIPS |
| | 1800-1900 | | meo | MEOWDERO |
| | | Playoffs | | |
| | | | | |
| | | | | |

| Go 9x9 | Tournament director: Prof. Iida Hideki Kato: Schema Double round-robin | | |
|----------------|---------------------------------------------------------------------------------|-----------|---------------------|
| Monday | June 27 | ID | Program |
| 1100-1200 | Setup | aba | ABAKUS |
| 1400-1500 | Round 1 | zen | ZEN |
| 1500-1515 | break | ezg | EZGO |
| 1515-1615 | Round 2 | cgi | CGI Go INTELLIGENCE |
| | | | |
| | | | |
| Tuesday | June 28 | | |
| 1100-1200 | Round 3 | | |
| 1200- | Playoffs | | |
| | | | |

| Go 13x13 | Round-robin | ID | Program |
|------------------|---------------------|-----------|---------------------|
| Wednesday | June 29 | Aba | ABAKUS |
| 1400-1430 | Setup | zen | ZEN |
| 1430-1530 | Round 1 | cgi | CGI GO INTELLIGENCE |
| 1530-1545 | break | | |
| 1545-1645 | Round 2 | | |
| 1645-1700 | break | | |
| 1700-1800 | Playoffs, medals | | |

| Go 19x19 | Round-robin | ID | Program |
|-----------------|---------------------|-----------|---------------------|
| Friday | July 1 | Aba | ABAKUS |
| 1500-1600 | Setup | zen | ZEN |
| 1600-1730 | Round 1 | cgi | CGI GO INTELLIGENCE |
| | | oak | OAKFOAM ENGINE |
| | | | |
| Saturday | July 2 | | |
| 0930-1000 | Setup | | |
| 1100-1230 | Round 2 | | |
| 1230-1245 | Lunch | | |
| 1400-1530 | Round 3 | | |
| | Playoffs, medals | | |
| | | | |

| Hex 11x11 | (2 double rounds) | | ID | Program |
|------------------------------------|-------------------|--|-----------|----------------|
| Monday 27-6 | | | MoH | MOHEX |
| Tuesday 28-6 | | | hex | HEXAMAZE |
| Tournament Director Hex R. Hayward | | | ezo | EZO |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Hex 13x13 | (2 double rounds) | | ID | Program |
|-----------------------------------------------|-------------------|--|-----------|----------------|
| Tournament Director Hex R. Hayward | | | MoH | MOHEX |
| Wednesday Lecture on Alpha Go by Aja Huang | | | Hex | HEXAMAZE |
| Thursday 1-7 | | | ezo | EZO |
| Friday 2-7 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| LOA | (4 double rounds) | | ID | Program |
|------------|-------------------|--|-----------|----------------|
| July 1 | 1300-1400 | | LL | LUCKY LINE |
| Fri | 1400-1500 | | dnik | DEEPNIKITA |
| | 1500-1600 | | | |
| | 1600-1700 | | | |
| July 2 | 1000-1100 | | | |
| Sat | 1100-1200 | | | |
| | 1200-1300 | | | |
| | 1300-1400 | | | |

| Mahjong | (2 double rounds) | | ID | Program |
|----------------|-------------------|----------|-----------|----------------|
| June 28 | 1000-1100 | | afk | MAHJONGDAXIA |
| Tues | 1100-1200 | | VCat | VERYLONGCAT |
| | 1200-1300 | break | Thou | THOUSANDWIND |
| | 1300-1400 | | | |
| | 1400-1500 | | | |
| | 1500-1600 | break | | |
| | 1600-1700 | | | |
| | 1700-1800 | | | |
| | 1800-1900 | Playoffs | | |

2x3 rounds

| MiniShogi | Harm-Geert Muller is in charge | | ID | Program |
|------------------|--------------------------------|----------|-----------|----------------|
| July 1 | 1200-1300 | | hin | HINATA |
| Fri | 1300-1400 | | shokd | SHOKIDOKI |
| | 1400-1500 | | Evg | EVG |
| | 1500-1600 | | DN | DEEPNIKITA |
| | 1600-1700 | | | |
| | 1700-1800 | | | |
| | 1800-1900 | | | |
| July 2 | 1000-1100 | | | |
| Sat | 1100-1200 | | | |
| | 1200-1300 | Playoffs | | |
| | | | | |

| Nonogram | (2 double round robin) | | ID | Program |
|-----------------|------------------------|----------|-----------|----------------|
| June 30 | 1400-1500 | | Lala | LALAFROGKK |
| Thu | 1500-1600 | | show45 | THUNoNo |
| | 1600-1700 | | and | ANDREA |
| | 1700-1800 | | liebe | LIEBE |
| July 1 | 1000-1100 | | | |
| Fri | 1100-1200 | | | |
| | 1200-1300 | | | |
| | 1300-1400 | | | |
| | 1400-1500 | Playoffs | | |
| | | | | |
| | | | | |

2 rounds

| Othello | (2 double rounds) | | ID | Program |
|----------------|-------------------|----------|-----------|----------------|
| July 1 | 1400-1500 | | mav | MAVERICK |
| Fri | 1500-1600 | | neko | NEKO |
| | 1700-1800 | | | |
| July 2 | 1100-1200 | | | |
| Sat | 1200-1300 | | | |
| | 1300-1400 | | | |
| | 1400-1500 | Playoffs | | |

2x 3 rounds

| Outer-Open Gomoku | (2 double round robin) | | ID | Program |
|--------------------------|------------------------|----------|-----------|----------------|
| July 1 | 1200-1300 | | OOG | OOGIVEME FIVE |
| Fri | 1300-1400 | | jac | JACKSON FIVE |
| | 1400-1500 | | Mark | MARK |
| | 1500-1600 | | | |
| | 1600-1700 | | | |
| | 1700-1800 | | | |
| July 2 | 1000-1100 | | | |
| Sat | 1100-1200 | | | |
| | | Playoffs | | |
| | | | | |
| | | | | |

2 rounds

| Surakarta | (2 double rounds) | | ID | Program |
|------------------|-------------------|----------|-----------|----------------|
| July 1 | 1400-1500 | | dnik | DEEP NIKITA |
| Fri | 1500-1600 | | dom | DOMINATING |
| | 1700-1800 | | VS | V&S SURAKARTA |
| July 2 | 1100-1200 | | | |
| Sat | 1200-1300 | | | |
| | 1300-1400 | | | |
| | 1400-1500 | Playoffs | | |
| | | | | |
| | | | | |

2x3 rounds

| 2048 | (4 double rounds) | | ID | Program |
|-------------|-------------------|--|-----------|----------------|
| June 27 | 1300-1400 | | tdl | TDL2048+ |
| Mon | 1400-1500 | | dnik | DEEP NIKITA |
| | 1500-1600 | | | |
| | 1600-1700 | | | |
| June 28 | 1000-1100 | | | |
| Tues | 1100-1200 | | | |
| | 1200-1300 | | | |
| | 1300-1400 | | | |

Participants in the 19th Computer Olympiad

Amazons

8QP (Johan de Koning, The Netherlands)

INVADER (Richard Lorentz, USA)

UNSTOPPABLE (Zhao Junyao, Xin Song, Kunyu Luo, China)

X+ (Bian Chang et al., China)

Backgammon

ELDER_HA (Chijin Zhou, Bo Gao, Shengjie Ma, China)

BGBLITZ (Frank Berger, Germany)

GNU BACKGAMMON (Nardy Pillards, The Netherlands)

Block Go

MM Go (S-J. Yen, Taiwan)

LeftHand (Jr-C. Chen, Taiwan)

Breakthrough

WANDERER (Richard Lorentz, USA)

BOB (Hendrik Baier, The Netherlands)

DEEP NIKITA (Andrew Lin, USA)

KINGKONG (Nicolas Jouandea, France)

Chinese Chess

HAQIKI D (Harm Geert Muller, The Netherlands)

CHIMO (I-Chen Wu, Taiwan)

XIEXIEMASTER (Pascal Tang, France)

SHIGA (Shi-Jim Yen, Taiwan)

Chinese Dark Chess

YAHARI (Jr-Chang Chen, Taiwan)

HOMER (Nicolas Jouandea, France)

DARKKNIGHT (I-Chen Wu, Taiwan)

DANCING (Yen-Chi Chen, Taiwan)

OBSERVER (Shun-Shii Lin, Taiwan)

Clobber

KLOPPER (Johannes Schwagereit, Germany)

PAN (Johan de Koning, The Netherlands)

Connect6

FLOATING CLOUD (Yunxiao Sun, Qihong Zhang, Xin Song, China)

EXPLORER (Zhang Yunpeng, China)

Dots and Boxes

THE SHARK (William Fraser, USA)

DOTSOLE (Junyao Zhao, Tianli Zhang, Bo Gao, China)

10x10 Draughts

BIT.SAY (Yunxiao Sun, Chijin Zhou, Shangjie Ma, China)

SJENDE BLYN (Jelle Wiersma, The Netherlands)

MOBY DAM (Harm Jetten, The Netherlands)

TORNADO (Frank Mesander, The Netherlands)

CERBERUS (Leo Nagels, The Netherlands)

MAXIMUS (Jan-Jaap van Horssen, The Netherlands)

SLAGZET.COM (Maurits Meijer, The Netherlands)

TDKING (Ton Tillemans, Switzerland)

QI2WIN (Zhang Yunpeng, China)

SCAN (Fabien Letouzey, France)

Ein Stein Würfelt Nicht

DEEP NIKITA (Andrew Lin, USA)

E-MC2 (Yasumasa Tamura, Japan)

HANFRIED (Ingo Althöfer, Germany)

VSWTN (Zhang Yunpeng et al., China)

KATZE OHREN (Pin-Ju Lin, Taiwan)

POINTLINEPLANE (Shao-Kang Tsao et al., Taiwan)

MEOWDERO (Chang-Long Sie et al., Taiwan)

Go 9x9

ZEN (Hideki Kato, Japan)

EZGO (Yu-Hsuan Hsu et al., Taiwan)

CGI Go Intelligence (I-Chen Wu, Taiwan)

ABAKUS (Tobias Graf, Germany)

Go 13x13

ZEN (Hideki Kato, Japan)
CGI Go Intelligence (I-Chen Wu, Taiwan)
ABAKUS (Tobias Graf, Germany)

Go 19x19

ZEN (Hideki Kato, Japan)
CGI Go Intelligence (I-Chen Wu, Taiwan)
OAKFOAM ENGINE (Detlef Schmicker, Germany)
ABAKUS (Tobias Graf, Germany)

Hex 11x11

MOHEX (Ryan Hayward, Noah Weninger, Kenny Young, et al., Canada)
HEXAMAZE (Tianli Zhang, China)
EZO (Kei Takada, Japan)

Hex 13x13

MOHEX (Ryan Hayward, Canada)
HEXAMAZE (Tianli Zhang, China)
EZO (Kei Takada, Japan)

LOA

LUCKY LINE (Junyao Zhao, Qihong Zhang, Kunyu Luo, China)
DEEPNIKITA (Andrew Lin, USA)

Mahjong

MAHJONGDAXIA (Chun-Wei Wu et al., Taiwan)
VERYLONGCAT (I-Chen Wu, Taiwan)
THOUSANDWIND (Shun-Shii Lin, Taiwan)

MiniShogi

SHOKIDOKI (Harm Geert Muller, Netherlands)
HINATA (Gang-Yu Fang, Taiwan)

Nonogram

LALAFROGKK (I-Chen Wu, Taiwan)
THUNONO (Lung-Pin Chen, Taiwan)
ANDREA (Shun-Shii Lin, Taiwan)
LIEBE (Shun-Shii Lin, Taiwan)

Othello

Godzilla (Nicolas Jouandeau, France)

Maverick (Yen-Chi Chen, Taiwan)

EVGLRY (Shun-Chin Hsu, Taiwan)

Outer-Open Gomoku

OOGIVEMEFIVE (Chih-Hung Chen, Taiwan)

JACKSONFIVE (Shun-Shi Lin, Taiwan)

MARK (Yi-Wei Ma, China)

Surakarta

DEEPNIKITA (Andrew Lin, USA)

DOMINATING (Junyao Zhao, Lifeng Chen, Gaoxun Chen)

V&S SURAKARTA (Zhang Yunpeng, China)

2048

DEEPNIKITA (Andrew Lin, USA)

TDL2048+ (Hung Guei, Taiwan)

Special events

June 27: Snellius Building
10.00 hours: Players Meeting Chess, Turing room
11.00 hours: Players Meeting Olympiad, room 302

June 29: Gorlaeus Building, room 1

14.00 hours:

Public Event on Alpha Go

Aja Huang, GoogleDeepMind

AlphaGo: Combining Deep Neural Networks with Tree Search

Abstract:

In this talk we will present the source of power of AlphaGo. In AlphaGo, we use ‘value networks’ to evaluate board positions and ‘policy networks’ to select moves. These deep neural networks are trained by a novel combination of supervised learning from human expert games, and reinforcement learning from games of self-play. Without any look ahead search, the neural networks play Go at the level of state-of-the-art Monte Carlo tree search programs that simulate thousands of random games of self-play. We also introduce a new search algorithm that combines Monte Carlo simulation with value and policy networks. Using this search algorithm, our program AlphaGo achieved a 99.8% winning rate against other Go programs, and defeated the human European Go champion by 5 games to 0. In March 2016 AlphaGo defeated Lee Sedol, the strongest human Go player in the last decade.

June 30: 19.00 hours:
Excursion and Dinner in the Museum Naturalis, Leiden.

July 1: Two lectures in room 174
Artificial Intelligence and Complexity by Christiaan Posthoff,
presented by Jaap van den Herik
‘Shannon’ presentation by Ingo Althöfer

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