

Expanded BioGraphy

Jaap van den Herik started as a Chess Player, became a Mathematician and then a Computer Scientist, and a Founding Father of AI in the Netherlands. Subsequently, in 1991 he caused some upset in the Netherlands by his Inaugural Address at the Faculty of Law of the Leiden University, titled: *Can Computers Judge Court Cases?* His answer was affirmative.

Teaching activities

Jaap van den Herik (1947) studied Mathematics at the **Vrije Universiteit Amsterdam** (with honours), obtained his PhD at Delft University of Technology in 1983 (subject: Chess and Artificial Intelligence) In 1984 he was visiting professor at the **McGill University**, School of Computer Science in Montreal. Between 1984 and 1988, van den Herik was affiliated at **Leiden University** at the department of Computer Science (now LIACS). Subsequently, he was appointed professor of Computer Science at **Maastricht University** (1987- 2008). In 1988 he accepted a part-time appointment as professor of the named chair **Legal Informatics at Leiden University**. In 2008 he changed universities (from Maastricht to Tilburg) and accepted a professorship of Computer Science at the Faculty of Humanities of **Tilburg University**, where he gave shape to the new research area *e-Humanities* (2008-2016). Since 2012, he is also a fellow professor at the Centre for Regional Knowledge Development (CRK), for the supervision of PhD students (nowadays called **Dual PhD Centre** (DPC)).

With effect from January 1, 2014, his appointment at Leiden University was broadened to professor of Law and Computer Science at the Faculty of Law and

the Faculty of Science. He became part of the Leiden Institute of Advanced Computer Science (LIACS). Together with Joost Kok and Jacqueline Meulman, he founded the Leiden Centre of Data Science (LCDS).

In March 2018, the Committee of Deans of Leiden University offered him the opportunity to further develop LCDS into a Multidisciplinary direction, viz. into the direction of **Legal Technologies**. Together with the head of the Centre for Professional Learning (CPL, Nikol Hopman) and Jan Scholtes, van den Herik launched a really professional course LLTP (Leiden Legal Technologies Program). The new course line was supported by the **Faculties of Law, the Faculty of Governance and Global Affairs, and the Faculty of Science**. Additionally, financial support was obtained from the Municipality of The Hague and the Ministry of Justice and Security.

Van den Herik has been a successful **supervisor of 93 promoti/tae** (PhD students).

Organisational Activities in the Scientific Field in the Netherlands

In the Netherlands vdH has (co-)initiated various research areas and has put them on the (inter)national research map by designing a unifying structure for them and giving the activities shape and character. Eight telling instances are:

(1) **Computer Chess Association in the Netherlands** (CSVN, 1980; *honorary member*),

(2) **Netherlands Association of Artificial Intelligence** ((B)NVKI, 1981; *honorary member*),

(3) **Legal Knowledge Systems** (JURIX foundation, 1989; *Honorary President*).

(4) **Founding Director of IKAT** (Institute of Knowledge and Agent Technology, 1990)

(5) one of the founders of the **Netherlands Research School for Informatics and Knowledge Systems** (SIKS, 1996, *honorary member*)

(6) transformed the **ICCA** (International Computer Chess Association) into **ICGA** (International Computer Games Association, 1992; *Honorary Editor*)

(7) **Founding Director of TiCC** (Tilburg centre for Cognition and Communication, 2008) and

(8) **Co-founder of Leiden Centre of Data Science** (LCDS, 2014).

Furthermore, he has been active within NWO (Chairperson of ToKeN 2000, TOKEN, and CATCH), as well as Chair of Big Grid (NWO-NCF) and Vice-Chair of NCF, and Co-Founder and Executive Board Member of the Leiden-Delft-Erasmus Centre for BOLD Cities.

Main International activities

Internationally, he promoted **Computer Chess** as a *leading AI research area* in the ICCA/ICGA Journal (Honorary Editor) for 33 years. International cooperation started at the end of the 1970s with Max Bramer (SSAISB) and Michael Botvinnik (Computer Chess). The international scientific start was at the 1980 AISB **Conference on Artificial Intelligence** in Amsterdam (General Chair Bob Wielinga). In 1982 the **ECCAI** started under this name and in 1983 it was decided to have the official location in Brussels (thanks to Luc Steels). vdH was a kind of consultant.

In 1992 the NVKI submitted a proposal for **ECAI 1994** in Amsterdam. It was agreed with van den Herik as Organisational Chair and Tony Cohn as Conference Chair. That was the beginning of many ECAI activities which were supported in one or another form by me but organised by others e.g., the **ECAI 2016** in The Hague (van Harmelen). During the **ECAI/IJCAI** (Stockholm 2018), vdH organized the WCCC (World Computer Chess Championship). In Kraków **ECAI 2022**, he gave an invited lecture titled *History and Future of AI*.

In 2013 vdH was invited key note speaker at ICAART 2013 (International Conference on Agents and ARTificial intelligence). That was a start of long-time cooperation as member of the PC (2014 -2015), Program Chair(2016-2018) and Conference Chair 2019-now). Current he cooperates very fruitfully with Luc Steels and Ana Paula Rocha).

In 2019 van den Herik was appointed part-time professor of Artificial Intelligence at the **Shandong Normal University** in China. The appointment started enthusiastically, but Corona interrupted the cooperation. On October 8, 2021 van den Herik had his valedictory lecture at Leiden University, titled: “The power of the blind spot”. As professor emeritus he is now guiding the final three PhD students. One of them, the talented PhD student Georgios Stathis developed under his supervision the concept of *iContract* (meaning *intelligent* contract). Owing to our long-time working relation with Dr. Pavan Duggal, Advocate of the High Court in India we were able to present the ideas twice (2022 and 2023) to their judges. On March 18, 2024 our ideas were published in *AI & Ethics* under the title *Ethical and preventive legal technology*. There, attention is also given to the European AI ACT.

Please see this link: <https://link.springer.com/article/10.1007/s43681-023-00413-2>

Memberships

Van den Herik is a member of the *Royal Holland Society of Science and Humanities* (KHMW) and of the *Batavian Society for Experimental Philosophy*. For the *Royal Netherlands Academy of Arts and Sciences* he was a member of TWINS.

Societal point of view,

From a societal point of view, he served as a board member of the *Humanistic Foundation Socrates* (2000-2019) and *SeniorWeb* (2020 –2024). Currently, he is active as science advisor at the *Max Euwe Centre* (MEC) and strategic advisor at *HCSS*.

Distinctions from the Field

*BNVKI – Benelux Association for Artificial Intelligence (Honorary member)

CSVN – Computer Chess Association of the Netherlands (Honorary member)

JURIX – Foundation for JURIdical eXpert systems (Honorary President)

SIKS – School of Information and Knowledge Systems (Honorary member)

ECCAI / EurAI – European Community for Artificial Intelligence (Fellow)

ICCA / ICGA – International Computer Chess (Games) Association (Honorary Editor)

Since 2003 Jaap van den Herik is an **ECCAI fellow** (now EurAI fellow).

In 2012, he was co-recipient (PI Jos Vermaseren) of an **ERC Advanced Research Grant** for the HEPGAME (High Energy Physics equations and GAMEs) project, “Solving High Energy Physics Equations using Monte Carlo Gaming Techniques”.

Van den Herik received together Omid E. David, Moshe Koppel, and Nathan S. Netanyahu a **Humies Award** in 2014, for their work “Genetic Algorithms for Evolving Computer Chess Programs”.

Moreover vdH is a **research member** of CLAIRE.

Royal distinction

H. Jaap van den Herik was appointed *Officer in the Order of Orange-Nassau* on October 8, 2021.

Publications

Link

<https://dblp.org/pid/h/HJaapvandenHerik.html>