# Contributions of magmaOffenburg 2010 Team Members to RoboCup

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**Abstract.** This paper contains a list of contributions of magmaOffenburg team members. It is provided as part of the qualification procedure for RoboCup 2010 3D simulation league.

## 1 Previous Achievements in RoboCup

The magmaOffenburg team is the successor team of the 2D simulation league teams magmaFreiburg, living systems and magmaFurtwangen. Achievements include:

- 1999: $2^{nd}$ after CMUnited
- 2000: $5^{th}$
- 2001: equal $13^{th}$
- 2003: equal $23^{rd}$
- 2009: equal $9^{th}$

Participation since then was interrupted by changing to industry. Now with a professorship at the Hochschule Offenburg we had a comeback in 2009 3D simulation.

## 2 RoboCup publications

The paper [4] was one of only two papers of the RoboCup community accepted for the IJCAI99 conference. At that time RoboCup was no conference of its own but colocated with IJCAI.

The PhD thesis [3] as well as the paper [2] describe the application of extended behavior networks in the RoboCup domain.

The paper [1] was accepted for the 2009 RoboCup symposium as poster.

## 3 Contributions to Simulation Development

The team leader is one of five authors of the RoboCup Simpspark user's manual as well as co-author of the 2D simulation user's manual.

Also the team released the complete Java source code for the agent runtime. To our knowledge this is the first code release in Java and hopefully a big help for new teams to enter the league.

## 4 Positions in RoboCup

The team leader was member of the 2D simulation technical comittee for the year 1999–2000.

Co-chair of the 3D simulation league at the German Open 2009 and chair of German Open 2010 3D simulation. The team leader is also member of the RoboCup Executive Committee since 2009 representing the simulation league.

## References

1. Dorer, K.: Modeling Human Decision Making using Extended Behavior Networks. To appear in: RoboCup Symposium, Graz, Austria (2009)
2. Dorer, K.: Extended Behavior Networks for Behavior Selection in Dynamic and Continuous Domains. In: U. Visser, et al. (Eds.) Proceedings of the ECAI workshop Agents in dynamic domains, Valencia, Spain (2004)
3. Dorer, K.: Motivation, Handlungskontrolle und Zielmanagement in autonomen Agenten. PhD thesis, Albert-Ludwigs University (2000)
4. Dorer, K.: Behavior Networks for Continuous Domains using Situation–Dependent Motivations. Proceedings of the Sixteenth International Conference of Artificial Intelligence (1999) 1233–1238