

Task 4.3

Neural Emotion-Action Integration

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BRAIN node

Supervisor (University of Hamburg): Stefan Wermter, Cornelius Weber

Co-supervisor (University of Skövde): Tom Ziemke

RobotDoC

Robotics for Development of Cognition

Self-introduction

- Nicolás Ignacio Navarro Guerrero
- Born (1983) and raised in Curicó – Chile
- Studied Electronic Engineering at the Universidad Técnica Federico Santa María. Valparaíso, Chile
- 1 year exchange program in the Technische Universität Dresden, Germany (DAAD scholarship)
- Almost two years in industry

Work and training experiences in the network

- Visit to the Cognition & Interaction Lab, University of Skövde, June 21-29, 2011
- RobotDoC training events
 - Interim meeting for introducing new Fellows (September 13, 2010), Plymouth, UK
 - Project Proposal Workshop (October 25-27, 2010), Bielefeld, Germany
 - Interdisciplinary Methods Spring School (May 2-4, 2011), Budapest, Hungary
 - Regular supervision and guidance including for expose and papers
 - Regular attendance to language course (English)
 - Attendance of 14x2hrs “Lectures on Knowledge Processing in Neural Networks”
 - Skill and development plan at early stages after arrival
 - ...

Work and training experiences outside network

- Attendance at workshops, seminars and conferences
 - Fifth CINACS International Summer School (September 1-10, 2010) in Hamburg, Germany
 - Talk in the first Aldebaran Robotics Tech Day (April 1st, 2011) in Magdeburg, Germany
 - Attendance to workshops and seminars (2010 and 2011) of the Graduate School Neuroadapt, Hamburg, Germany
 - International Symposium on Fear, Anxiety, Anxiety Disorders (September 15-17, 2011) in Würzburg, Germany (confirmed poster)
 - Paper and talk at the Conference Towards Autonomous Robotic Systems (TAROS, August 31 - September 2, 2011), Sheffield, UK
 - ...

Expectation and career development plan

- Acquire important skills to continue working on research in hybrid intelligent systems either in academia or in industry

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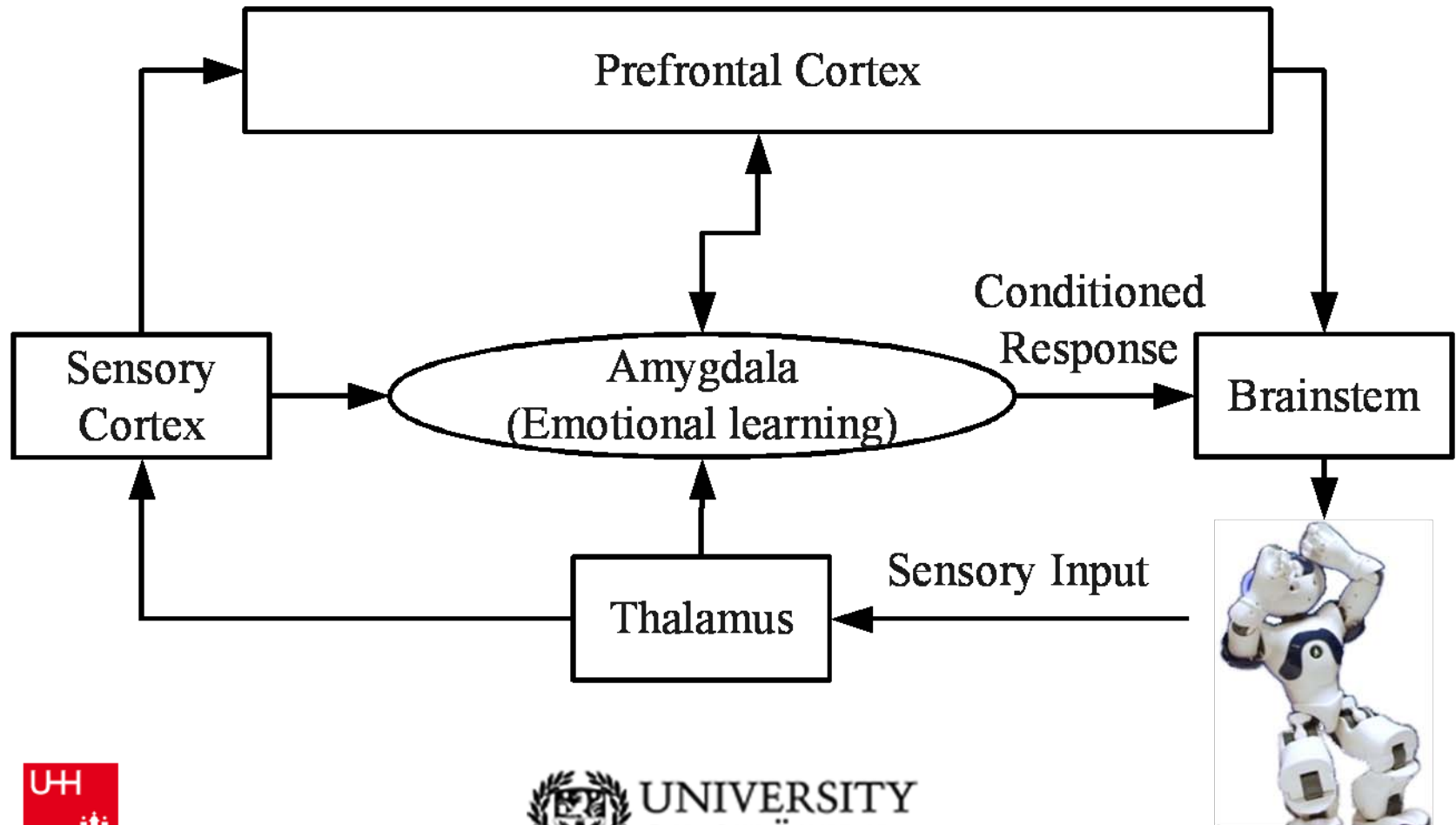
Study and assistance
of humans

Development of better
computational models

Research question

- How can we build an embodied affective system that learns to identify harmful and safe situations?

Neural emotion-action integration



Expected experimental results

- More human-like, staged reactive and deliberate robot behaviour
- Develop model-based theory of emotions