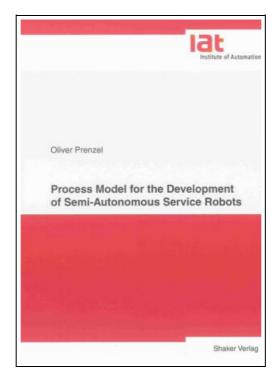
# Process Model for the Development of Semi-Autonomous Service Robots



Filesize: 4.26 MB

# Reviews

The ideal publication i at any time read through. It really is writter in easy phrases and never difficult to understand. Its been designed in an remarkably easy way which is merely right after i finished reading through this publication by which actually transformed me, affect the way i think.

(Jaqueline Flatley)

### PROCESS MODEL FOR THE DEVELOPMENT OF SEMI-AUTONOMOUS SERVICE ROBOTS



Shaker Verlag Sep 2009, 2009. Taschenbuch. Condition: Neu. Neuware - The creation of a universal service robot for daily use in the home or working environment is an ambitious objective of ongoing research and engineering efforts. Considering today's state-of-the-art, service robots cannot be expected to be able to act fully autonomously and intelligently in unstructured environments within the middle-term future. This is due to the generally high complexity of meaningful task executions, with still unsolved problems in task and motion planning as well as sufficient scene understanding. To encounter these problems, an approach has been developed that reduces the technical complexity with the help of two development paradigms: The task knowledge for a certain scenario is pre-structured, and the robotic system executes its tasks semi-autonomously, i.e. involves the user into task execution. By means of simulations in representative sample scenarios it has been demonstrated that the real time suitability of task planning based on this approach can be guaranteed. Within this work, the fundamental concepts are now integrated into a complete process model for the development of semi-autonomous service robots. The process model gives a clear guidance for a scenario- and behavior-driven development of a service robotic system. The process contains four levels and starts with analysis steps that lead to well-defined outputs for guiding subsequent steps. Due to the paradigm of pre-structuring and offline verification of task knowledge, a lot of effort is required for the introduction of new task knowledge and the enhancement of existing one. The complexity of the specification procedure is encountered with the development of special tools that provide a userfriendly input of task knowledge and fully integrate into the overall concept. The process of task knowledge specification leads to the definition of software interfaces that encapsulate functionality of a robotic system. Besides defining the...

- Read Process Model for the Development of Semi-Autonomous Service Robots Online
  - Download PDF Process Model for the Development of Semi-Autonomous Service Robots

# You May Also Like



Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel's System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\*
Print on Demand \*\*\*\*\*. This historic book may have numerous typos and missing text. Purchasers can download...
Download PDF »



# Dom's Dragon - Read it Yourself with Ladybird: Level 2

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, Dom's Dragon - Read it Yourself with Ladybird: Level 2, Mandy Ross, One day, Dom finds a little red egg and soon he is the owner...

Download PDF »



## It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em, Greg Behrendt, Amiira Ruotola-Behrendt, A fabulous new guide to dating...

Download PDF »



## Leave It to Me (Ballantine Reader's Circle)

Ballantine Books. PAPERBACK. Book Condition: New. 0449003965 12+ Year Old paperback book-Never Read-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship FAST...

Download PDF »



### You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most

Sourcebooks, Inc. Paperback / softback. Book Condition: new. BRAND NEW, You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most, Patricia Hermes, Thirteen-year-old Sarah Morrow doesn't think much of the...

Download PDF »