Preface

This volume contains the papers presented at FinE-R 2015: The Path to Success: Learning from Failures in real Robots held on October 1, 2015 in Hamburg.

There were 9 final accepted submissions where each submission was reviewed by at least 3 reviewers (including at least one senior reviewer). The program also included 2 invited talks.

Main goals of the workshop

Along the history there are many important discoveries that resulted from long trials and error processes (e.g. the electric light bulb from Edison) or from analyzing 'failed' results (e.g. the Michelson-Morley experiment). In each case, the key contributor for the final success was the willingness to learn from previous mistakes and to share the gained experience with the research community.

The path to progress in the field of robotics is not free of failures and caveats. These failures provide valuable lessons and insights on future approaches by analyzing errors and finding methods to avoid them. As such, the robotics community could benefit from the experience of those who had faced and overcome similar failures before.

The objective of this workshop is to provide a forum for researchers to share their personal experiences on their "failure to success" stories, to present what they have learnt, what others should avoid while experimenting in similar context, providing tips for better research practices and for creating more successful robots that meet people's expectations.

In addition, well known speakers in robotics will be invited to the workshop to share their experiences, how they avoid failures, and their recommendations for creating more robust and successful robots. Finally, the panel session will provide the right environment for attendees to learn and discuss good practices in the robotics area to avoid failing to satisfy people's expectations around robots.

Topics of interest (but not limited to)

- Analysis of failures when participating in robotic challenges

- Design of robust human-computer interfaces for robots

- When failure is not an option: creating an outstanding robot from HW to SW

- The search for errors: benchmarking and tools for testing robots

- Avoiding common but frequently seen errors when deploying robots for industrial or general public environments

- Advanced techniques for failure recovery and troubleshooting

- Matching the expectations and needs of industries and consumers with the current technology

- Alternatives to techniques and algorithms that are prone to fail

- The keys for successful research projects and proposals on robotics

- Analysis of failed results and projects when using smart algorithms, well-established techniques or brilliant designs

Acknowledgements

We want to specially thank to our two invited speakers (Prof. Ryad Chellali from *Nanjing Tech University, Nanjing, China* and Prof. Laurence DeVillers from *LIMSI-CNRS, Sorbonne University, France*) and to all members of the Advisory Committee (Rafael E. Banchs, Suraj Nair, and Marco A. Gutierrez) and the scientific committee for their valuable contribution and suggestions. In addition, we thank the Human Language Technology department at Institute for Infocomm Research (I2R-A*STAR) and TUM Create for their support to this workshop.

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