

Fredrik Ekdahl
Robotics

The **heart**
of Robotics



Industrial Co-operation & Innovation
Sample Co-operations – ABB



Fredrik Ekdahl



- Background:
 - M.Sc. Industrial Engineering & Management
 - Ph.D. Quality Technology & Management
 - Experience:
 - Several years of experience from managing research and development teams in a software intensive setting
 - Several years of international experience from coaching and driving performance improvement in software product development
 - Several years of experience from leading and participating on ABB internal CMMI appraisals
 - Multiple international publications and conference presentations on the subject of performance improvement in software product development
- Industrial advisor on several ongoing and completed research projects



Industrial Robotics



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Areas of Co-operation

■ Basic Education

- Lectures on various topics and industry experience
- Tutoring of master thesis projects
- Input on curricula
- Cherry picking talent

■ Sample Achievements

- Standing set of lectures in SW Engineering Course
- Multiple master theses completed every year
- SW Engineering Course

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Multiple students employed directly or channeled through to the business units



Areas of Co-operation

■ Research Education

- Industrial Licentiate and PhD Students
- Tutoring of Licentiate and PhD Students
- Joint Publications
- Joint Courses
- Research Advisors

■ Sample Achievements

- Multiple Tech. Licentiate and Ph.D. Students through the process
- Multiple recognized publications
- Advanced SW Architecture Principles and Practices



Areas of Co-operation

■ Research

- Research Partner
- Research Application Reference Group
- Active participation on research projects

■ Sample Achievements

- Attractive research results
- Successful completion of research projects in multiple disciplines
- Input on research direction strengthens industry relevance of research projects

Participation allows attractive competence development for senior staff



Experiences

- Active participation is necessary for true success
- Co-operation with the academic world is a strategic effort
- Leverage spin-off opportunities
- Co-operation is a two-way street
- Avoid involvement for the sake of involvement
- Building co-operation takes time
- Senior academic experience on the industry side is helpful
- Senior industry experience on the academic side is helpful
- Academic side needs to be eager and creative in accommodating various forms of co-operation, and so does the industry side
- Effective way of keeping senior staff and attracting junior talent

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Don't forget about the networking opportunities

Make sure you are on top of Intellectual Property rights



ABB