

DeMaMech Exchange Program

Sep 2004 – Aug 2005

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Summary

- Exchange of 10 months to Keio University
- Bio-Robotics Laboratory of Prof. T. Maeno
- Research topic was the design and development of wearable haptic interface for the human hand
- Interesting working environment
- No difficulties with adoption to the Japanese culture
- Great experience for personal development
- Fantastic time and even 10 months is too short

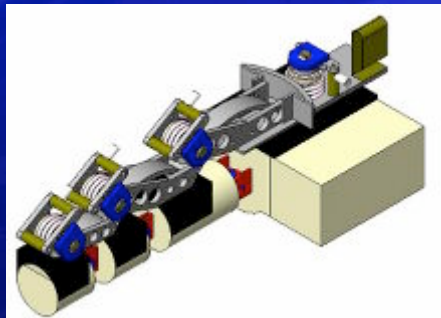
Research

Research Title:

Design and Development of a 4 DOF Wearable Haptic Interface for the Finger with Multi-Point Passive Force Feedback

- The design methodology of Pahl and Beitz is used
- Rolling-link mechanisms are used as mechanism
- The designed prototype is manufactured
- A Graphical User Interface is made for interaction
- A thorough evaluation of the prototype is executed

Research



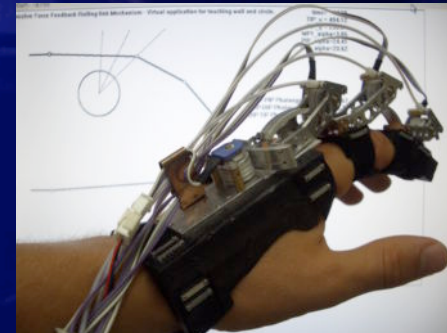
3D CAD Concept
generated with
the Pahl and Beitz
design
methodology



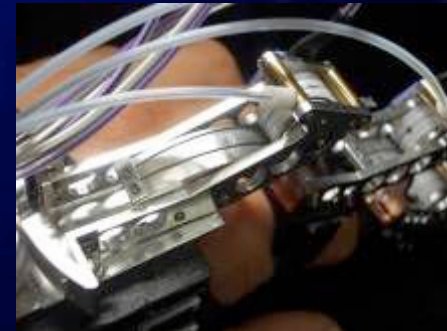
Prototype
stretched finger



Prototype
bent finger



With GUI



Prototype
mechanism

Student Life

Very pleasant, interesting and beautiful time!



Summary

Research

Student Live



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