AAL in bath room / toilet
Towards a better understanding of daily living user needs

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FAKULTÄT FÜR !NFORMATIK

- **Human Computer Interaction (HCI) Group** at *Institute of Visual computing & Human-Centered Technology* at TU Wien

  – Multidisciplinary, long term experiences in Assistive Technology (AT) and AAL;

  – User oriented, participatory, methods, a focus on real life usage, evaluation & ethics

    - http://igw.tuwien.ac.at/hci/

    - http://www.aat.tuwien.ac.at

  – Lectures on AT, AAL and HCI

  – Promotion of technology to empower full participation, e.g. UNIKATE award
  https://www.behindertenrat.at/projekte/unikate-ideenwettbewerb/

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- Coordinator of current iToilet AAL project

  - Creating and evaluating ICT supported toilet systems
  - Current focus on sit to stand support for autonomous use
    - Demonstration video http://itoilet-project.eu and http://www.aat.tuwien.ac.at/itoilet/pubs/video.mp4

- Our Vision: Extending the application area of this new platform

  - Supporting autonomy of users by
    - Monitoring **liquid balance** (dehydration)
    - Monitoring and inferring current **condition** of user
    - Providing **guidance** during use of toilet (disoriented persons)
  - Exploiting smart **toilets as part of** assistive **systems** and **services**
  - Application of iToilet in **semi-public settings** (theatre, museum, big shopping centres) in order to support users' participation and to avoid marginalisation and isolation at home

Full control to any position

iToilet also includes safety measures by emergency detection e.g. of falls

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- Looking for:

  - Companies with sound expertise in bio-impedance/body and vital parameter measurement

    - (e.g. target: dehydration measurement on toilet seat)

  - User partners with expertise and interest in

    - Dehydration

    - Guidance support to older persons in activities of daily living

    - Evaluation of systems and impact measurement

- We offer

  - For companies interested in co-design our resources to develop and evaluate their product ideas

  - Our expertise in HCI and HRI with assistive robots

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- Living Lab / Test- and Demo Apartment for user oriented research

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