Hearing Systems – Outlook

https://hearingsystems.github.io/

TU Ilmenau – Audio Systems Technology

(Online) | 2022-February-02

Dr.-Ing. Tamas Harczos

audifon
hearing systems
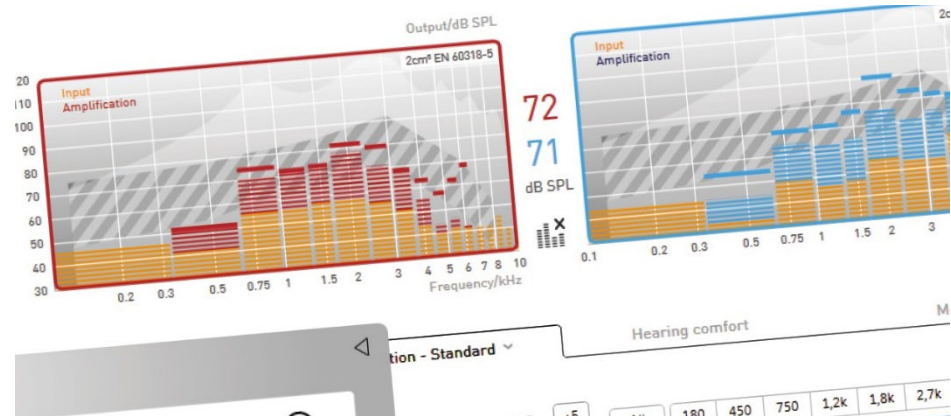
•• Recap: Hearing aids – Features

General:

- Small, lightweight, intuitive, discrete.
- Remote control, smartphone app.
- Wireless streaming (TV, remote microphone).
- Quickly rechargeable, long lasting battery.

Audiological features:

- Low noise, high bandwidth (10 kHz+).
- 16+ frequency channels for DRC.
- Adaptive microphone directionality.
- Noise reduction: ambient, wind, impulse.
- Environment classification.
- Advanced feedback cancelation.
- Frequency shifting.
- Low latency (<< 10 ms), binaural algorithms.

Fitness and medical features:

- Fitness tracking (step counter, pulse rate etc.).
- Blood pressure monitoring.
- On-demand activity log.
- Fall detection.

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- Graphical user interface & mobile app design.
- Quality control & test engineering.

Source: interton.com, 2021

•• Modalities and additional thoughts

Possible scopes:

- M.Sc. Thesis (compensation possible),
- B.Sc. Thesis,
- "Fachpraktikum",
- other cooperations.

Place of work:

- Ilmenau (audifon R&D office / TU Ilmenau)
- Kölleda (audifon HQ)
- Köln (audifon R&D office)

Take home message: **PROTECT YOUR EARS!**

(or at least come and work on future hearing aids with us)

Thank you very much!
Questions?

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audifon GmbH & Co. KG