simon

Open-Source Speech Recognition

Developed by the non profit organization Simon Listens in cooperation with Cyber-Byte IT services
Meet: David

• 18 years old
• Hobbies:
  • Music
  • TV
  • Friends
  • Girls
Meet: David

- 18 years old
- Hobbies:
  - Music
  - TV
  - Friends
  - Girls
Meet: Everybody
The Challenge

- According to EU: 6.4% suffer from disabilities affecting their arms and hands
  - 500 million * 6.4% = ~ 32 million
  - Reference: Finland + Norway + Sweden = ~ 20m
- Same study: 0.4% suffer from speech impairment
  - ~ 2 million

Source: eurostat, [hlth_db_emtyag]
simon: The Idea

- Speech recognition system
- Extremely flexible
  - Adapts to the user
  - Even speech impairments are no issue
  - Community: Potential
- Free software
simon: The Implementation

- Based on
  - Julius
  - HTK
  - KDE4
  - C++
- Supports
  - GNU/Linux
  - Windows
simon: Flexibility

- Vocabulary
- Grammar
- Sounds

Speech model

Language model

Acoustic model

Recognizer
• Language model: Scenarios
  • „Use-case-packages“
    - Vocabulary
    - Grammar
    - Commands
    - Trainings texts
• Acoustic model: Base models
  • Static
  • Adapted
Get involved

- Donate speech: [http://www.voxforge.org](http://www.voxforge.org)
- Create and share scenarios
- Software development
- Translation and documentation

- Contact: [support@simon-listens.org](mailto:support@simon-listens.org)
- Me personally: [grasch@simon-listens.org](mailto:grasch@simon-listens.org)
Questions?