

EmPACT

Empowering Pilots via Adaptive Competency-based Training

DI Dr. Benedikt Gollan
Research Studios Austria, Pervasive Computing Applications
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Kurzdarstellung der Konsortialpartner



Research Studios Austria
Forschungsgesellschaft

Research Studios Austria FG

- Non-university research organization

Focus on:

- Aware, Adaptive Training & Assistance Technologies

Competencies:

- Mobile, spatial eyetracking
- Cognitive Load Analysis
- Data-driven Competency-based Training & Assessment



Lufthansa Aviation Training Switzerland AG

- European lead full service provider in aviation training

Focus on:

- Training of cockpit and cabin crews

Competencies:

- Pilot Training
- Safety and Emergency Procedure Training
- Training Devices
- Human Factors



RotorSky GmbH

- Austrian lead in helicopter training

Focus on:

- Training private and commercial pilots

Competencies:

- RotorSky Academy with certified trainers
- Computer-based trainings for self-education
- Training in the aircraft
- Full range of licenses



Soma Reality GmbH

- Adaptive Virtual Reality Solutions

Focus on:

- Understanding human behavior in digital environments

Competencies:

- Customized solutions
- Digital biomarkers
- Cognitive Load and performance analysis
- Adaptive VR Trainings

NORDEN.AERO



Norden.aero GmbH

- CBTA expert

Focus on:

- Expertise with excellence in CBTA

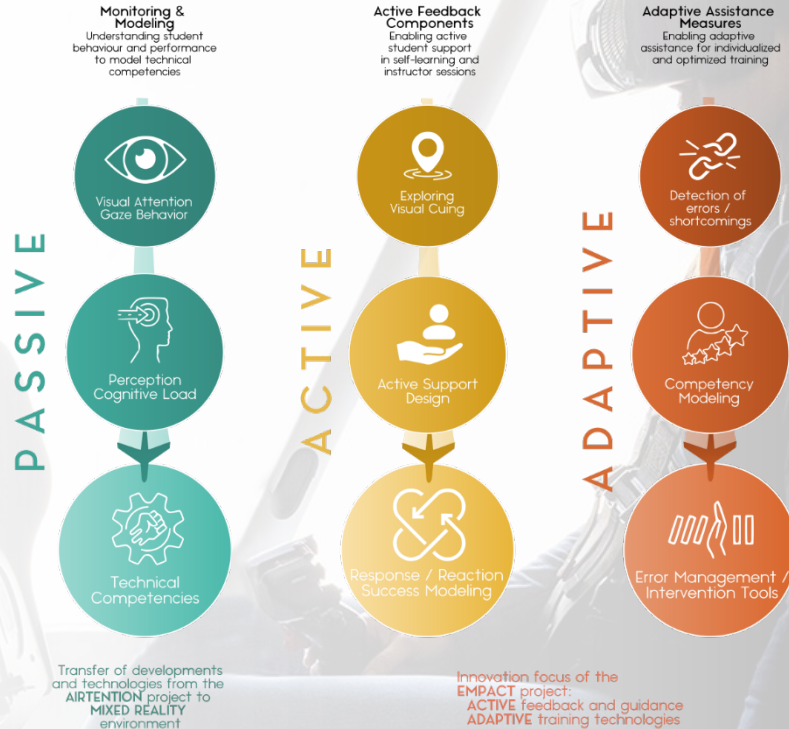
Competencies:

- CBTA Training for Authorities and Regulators
- EASA ATO Approvals
- EBT
- Instructor Accordance

Ziel des Projekts

Adaptive Pilot Training (VR)

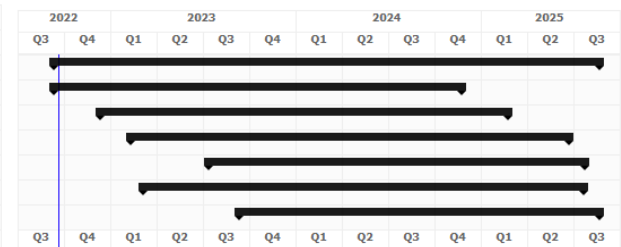
- Assessment of behavior and performance
 Visual Perception | Activity Analysis | Cognitive Load
- Modeling Pilot State and Competencies
 Automation | Workload Mgmt | Situational Awareness
- Detection of Errors and Shortcomings
 Comparison to reference behavior
- Automated Assistance Deployment
 Adaptation and Individualization of Training and Assistance



Arbeitsplan/Zeitplan/Umsetzung

- 3 year project
- PY1: technical solution
localization | manipulation of visualization
- PY2: Pilot Modeling &
Visualization
- PY3: Assistance & Impact
Validation

Ansicht: Woche Monat Quartal	Start	Ende
+ Projektmanagement	01.09.2022	31.08.2025
+ Technical Ecosystem	01.09.2022	01.12.2024
+ Active Assistance Feedback	02.12.2022	03.03.2025
+ Pilot Modeling	01.02.2023	01.07.2025
+ Adaptive Training	02.07.2023	31.07.2025
+ Use-Case Scenarios & Study Exec...	25.02.2023	28.07.2025
+ Impact on Training & Disseminat...	01.09.2023	31.08.2025



Angestrebte Verwertung



Kontakte

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