

Quantifying Pilot Workload in Flight Training via Gaze Behavior and HRV Analysis

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Abstract. This study explores the integration of gaze metrics and physiological stress indicators to assess workload variations during simulated flight training tasks of varying complexity. A flight simulation dataset comprising 24 airline transport pilots performing common approach phases is used to correlate eye-tracking data and heart rate variability (HRV) measures with subjective evaluation indices in order to assess pilots' workload levels.