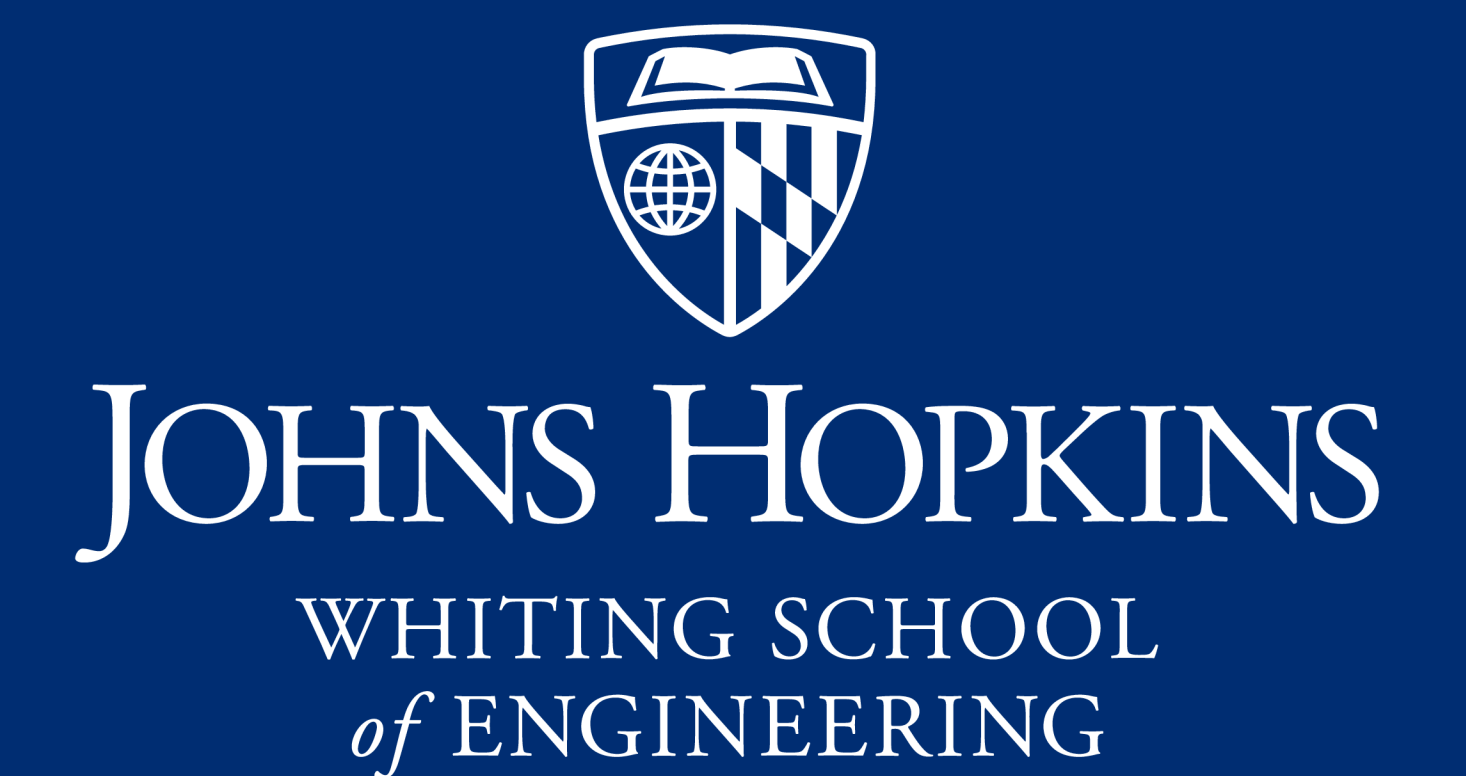




Gamifying Audiometry: Enhancing Reliability, Engagement, and Access

Kevin Ho, Sabrina Li, Elle Marine, Aaron Pressman, Kyle Tan
In Partnership with Captain Dan Barker and Colonel Harvey Pynn, United Kingdom Ministry of Defence



The Problem

Noise-Induced Hearing Loss (NIHL) is the leading service-related disability, yet it often goes undetected during active duty and is only identified after service.

\$42.8M Compensated to UK service members

Current testing relies on clinic-based **pure-tone audiometry (PTA)**, which is:

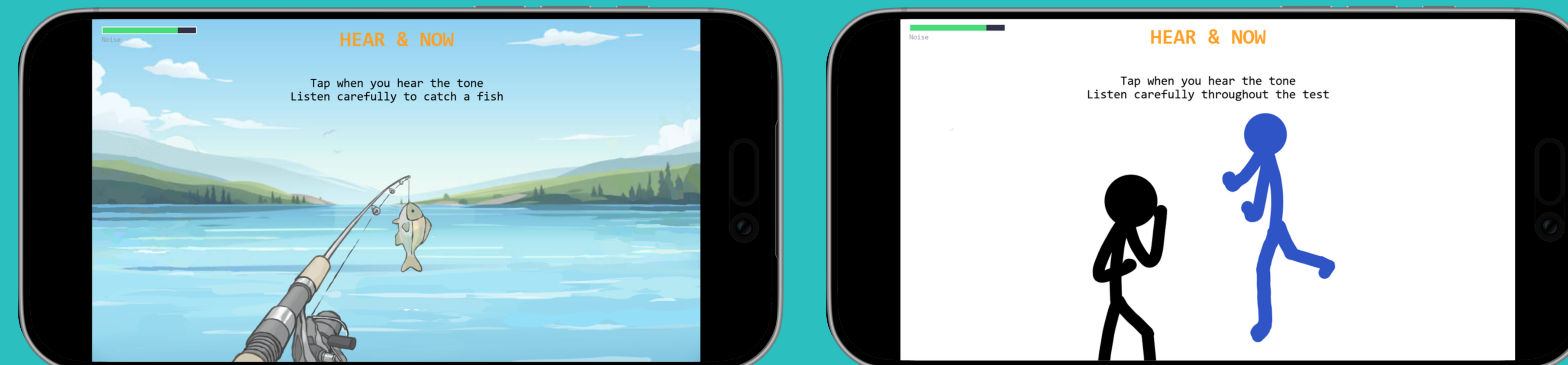
- 1 UNRELIABLE**
subject to cheating
- 2 INACCESSIBLE**
requiring equipment, clinical space & personnel
- 3 DISENGAGING**
repetitive and passive

The Opportunity

How do we deliver a more frequent, accessible, and reliable remote hearing screening to the UK Ministry of Defense?





Our Solution

Hear&Now: An app-based gamified platform for remote hearing screening and monitoring



By integrating PTA's Hughson-Westlake algorithm into a gamified interface, we created a test that maintains clinical validity while improving user engagement and reliability.

Features Include:

-  **Anti-cheat Detection**
-  **Environmental Screening**
-  **Headphone Verification**
-  **Automated Result Interpretation**

User Journey

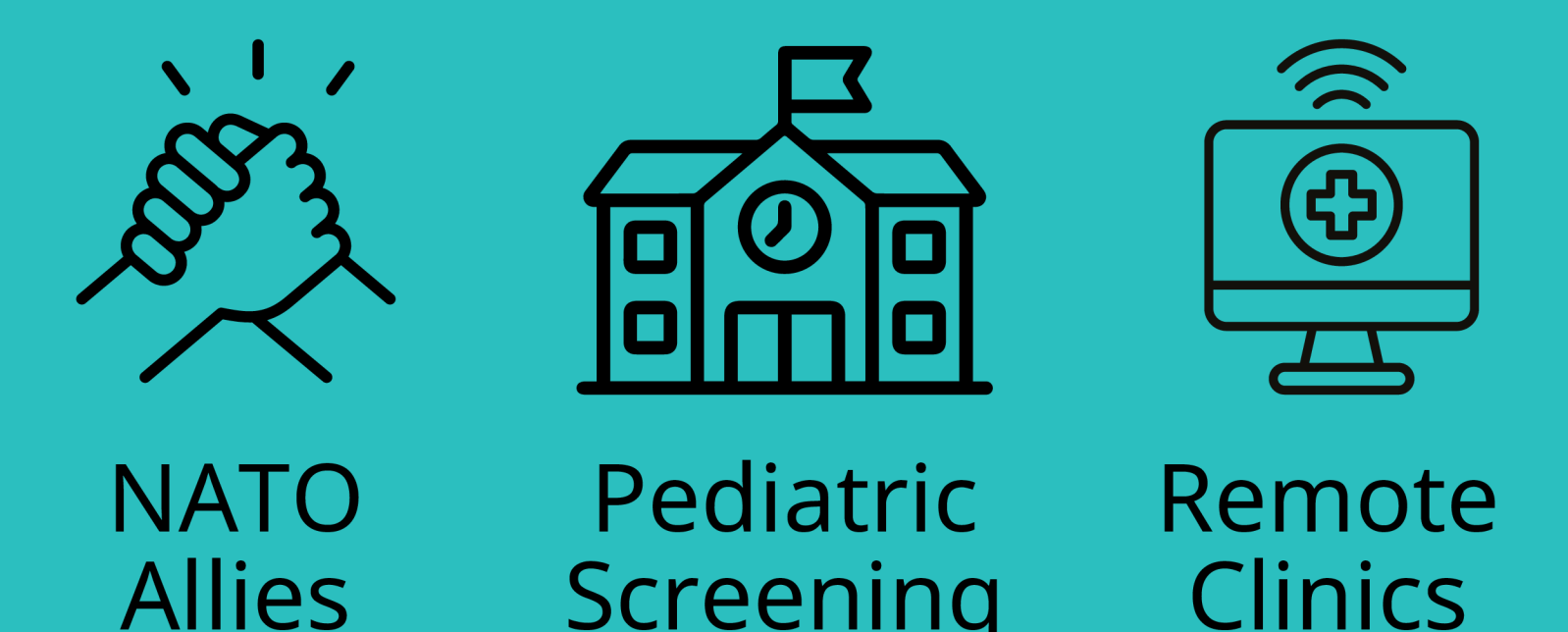


Audiologists Service Members Military Leaders



Broader Applications

Hear&Now can be adapted for additional use cases, including:



How it Works

- 2** Games
 - 7** Frequencies
 - 2** Ears
- Complete Hearing Profile**

Impact

INCREASED ACCESS
+ RELIABLE RESULTS
EARLY DETECTION OF NIHL