Designing Automated Evaluation and Feedback with Ambient AR and Use Cases

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Presented By Brenda Braitling, MISM

iFEST 2019

AR/VR Distributed Learning Session

GETTING FROM "NEED TO KNOW" TO "NEED TO DO" WITH AR & USE CASES

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Augmented Reality is a digital additive technology for enhancing real world Experiences.

Ambient AR provides an inclusive Sensing System which minimizes Interface intrusiveness.

Use Cases provide the unifying foundation for an Event to generate meaningful, shareable data.

By providing a clear description of **Performance Expectations for the Experience** ...

...the humble business Use Case becomes the source document for implementing an automated training and evaluation system.

A BRIEF LOOK AT
FLAVORS OF REALITY

Remember we are considering

personalized, augmented reality experiences…

Augmented Reality is Additive to what you already have...
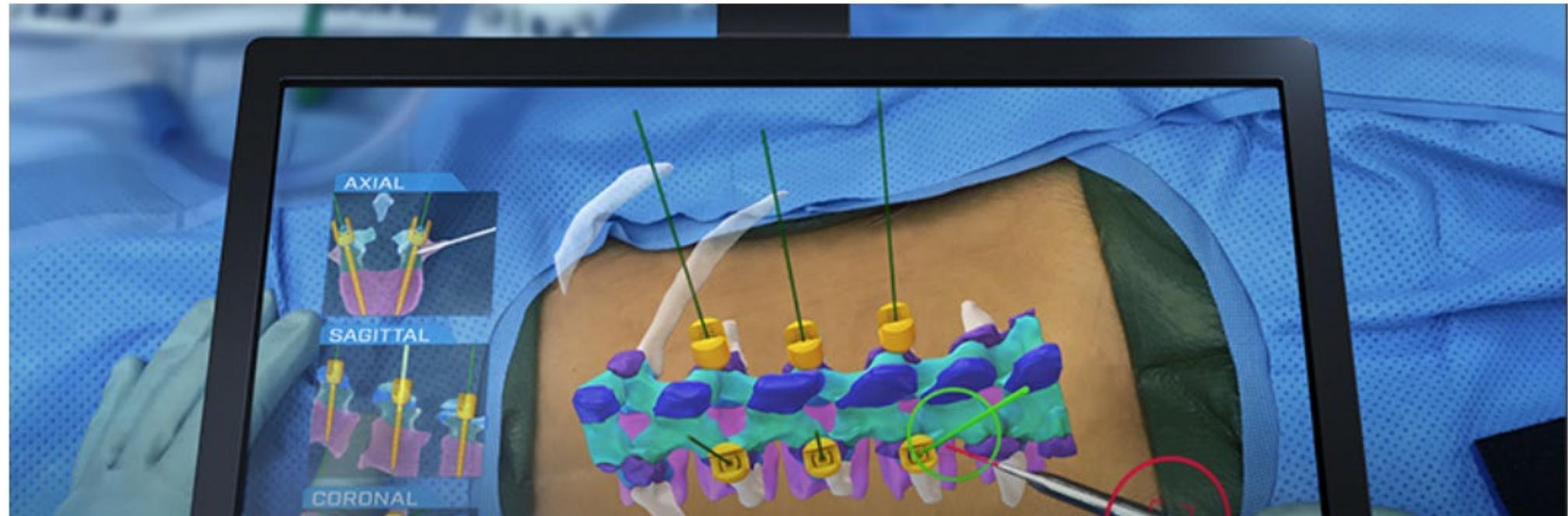
News | Augmented Reality News

ARAI System from HoloSurgical Enables the First AI-led Augmented Reality Surgical Procedure

By **Milos Antic** - January 11, 2019

👁 462

Virtual Reality is a totally different experience...

https://www.youtube.com/watch?v=oRbmLBWdEoI

Ambient is like you are INSIDE it and a PART OF it...
It is there even if you are not...
AR is specifically about YOUR Experience...

MED Tech Talk

HEALTHCARE IN THE AGE OF AMBIENT COMPUTING:

GETTING THE RIGHT INFORMATION, TO THE RIGHT PEOPLE, AT THE RIGHT TIME

Presented by NEMIC

WITH SPEAKER
TOM CHIGINSKY
FOUNDER OF AUDIO STRATEGY

SEP 04

Healthcare in the Age of Ambient Computing

by New England Medical Innovation Center

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Free

Again...   AR is specifically about YOUR Experience...
AR provides situational information to you, based on a Scenario...
It can use an Expected Scenario to **Train You** or **Evaluate You**

...Augmented Reality is an INTERFACE so it not only DELIVERS, it can OBSERVE and PROVIDE FEEDBACK

An AR Scenario is entirely digital and entirely specific to the Tasks being trained and programmed with Expectations...
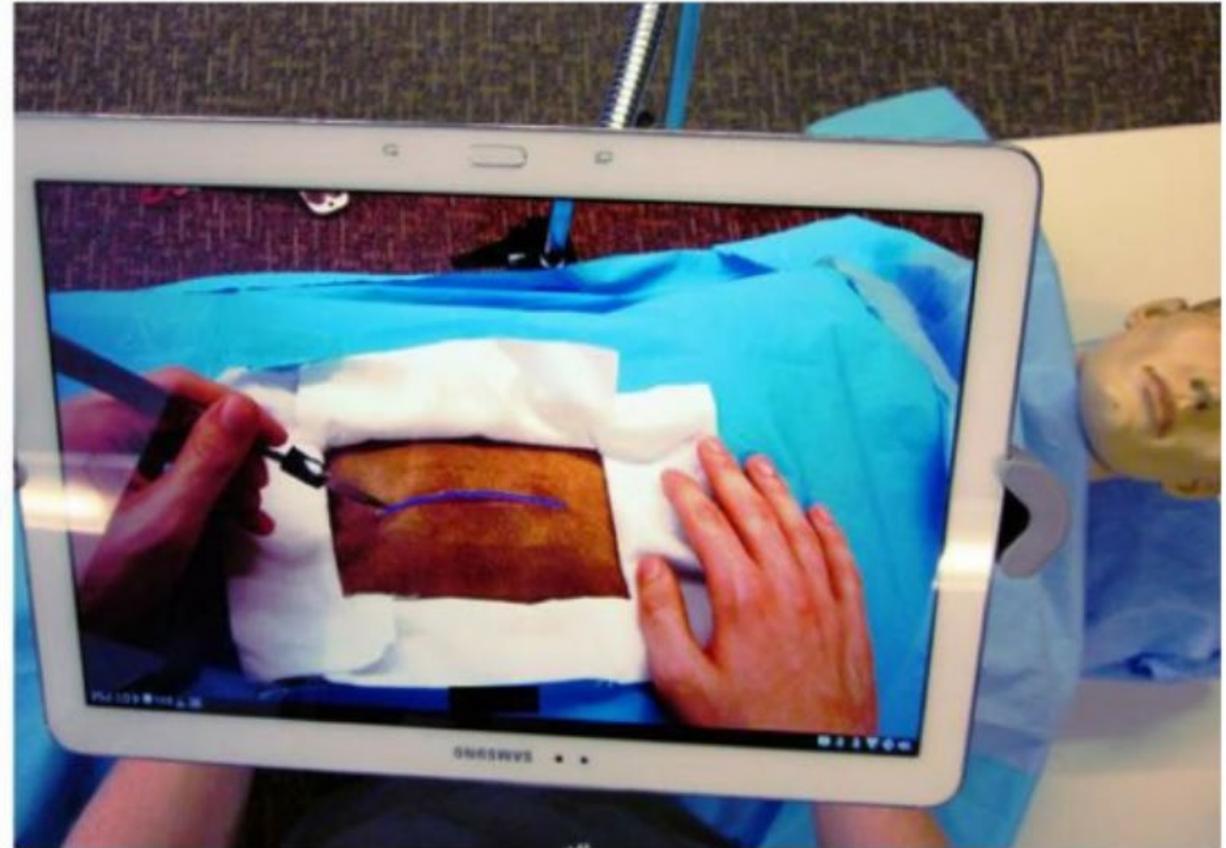
BUT WHAT CAN WE DO ABOUT IT?
SET GREAT **EXPECTATIONS**
AND CLEARLY **COMMUNICATE** THEM

People perform better

- when they understand **why** their work is **important** and

- when they feel **confident** in their ability to do their work well.

An example of a general Use Case

Use Case Name		[Name of the use case]
Actors		[An actor is a person or other entity external to the system being specified who interacts with the system and performs use cases to accomplish tasks]
Preconditions		[Activities that must take place, or any conditions that must be true, before the use case can be started]
Normal Flow	Description	[User actions and system responses that will take place during execution of the use case under normal, expected conditions.]
	Postconditions	[State of the system at the conclusion of the use case execution with a normal flow (nominal)]
Alternative flows and exceptions		[Major alternative flows or exceptions that may occur in the flow of event]
Non functional requirements		[All non-functional requirement: e.g., dependability (safety, reliability, etc.), performance, ergonomic]

PLEASE REFER TO YOUR HANDOUTS FOR SAMPLE USE CASES

How to write an agile user story

1 Define your **end user**
Who will be using your product?

As a parent,

2 Specify what **they want**
What solution are you offering?

I want to check on my sleeping baby without entering his room,

3 Describe **the benefit**
What will your user gain from using your product?

so that I know he is safe without disturbing him.

4 Add **acceptance criteria**
What determines this story as 'done'?

e.g. Alert to be sent to the registered smartphone if problem is detected.

Top tips to create a good user story

🖉 Develop a persona profile to visualise your end user

🖉 Always write from your end user's perspective

🖉 Avoid adding technical details too early

🖉 Try not to add too many acceptance criteria

🖉 Keep stories brief, breaking them up if you need to

🖉 Make sure they meet your "definition of done"

Knowledge TRAIN®

AUTOMATION...
USING MACHINE LEARNING AND AI...
OH MY!

Having clear cut **Rules** provided by **Use Cases**

combined with **Numerous Recordings** of the task

being performed well and not so well,

we have an opportunity to quiz people and train machines to score.

Specific

Can the detail in the information sufficient to pinpoint problems or opportunities? Is the objective sufficiently detailed to measure real-world problems and opportunities?

Measureable

Can a quantitative or qualitative attribute be applied to create a metric?

Actionable

Can the information be used to improve performance? If the objective doesn't change behaviour in staff to help them improve performance, there is little point in it!

Relevant

Can the information be applied to the specific problem faced by the marketer?

Time-bound

Can objectives be set for different time periods as targets to review against?

THANK YOU

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