

# 2013 Specialist Scholars Knowledge Sharing

**Rowan Peter**

# Proposed course of study

## Part 1 – Research

- Attend ARcamp 2.0 at University of Canberra in May 2013
- Explore AR platforms and technology

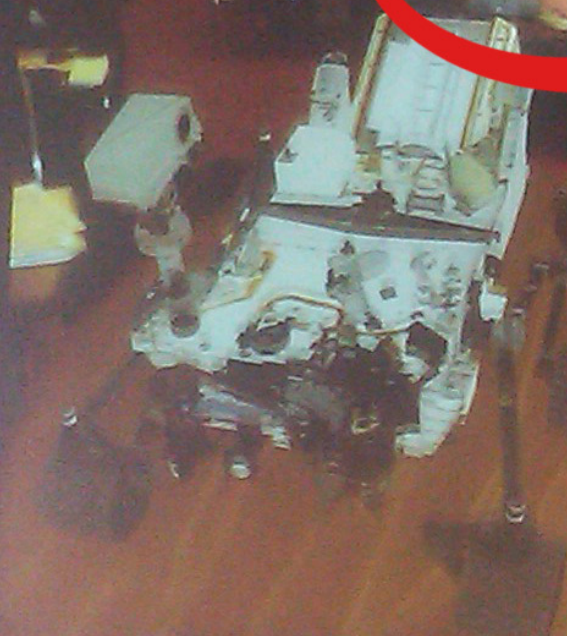
## Part 2 – Develop

- Design and develop augmented contextual instruction
- Trial with students and teacher
- Determine next steps

# History

SPACECRAFT 3D

Curiosity



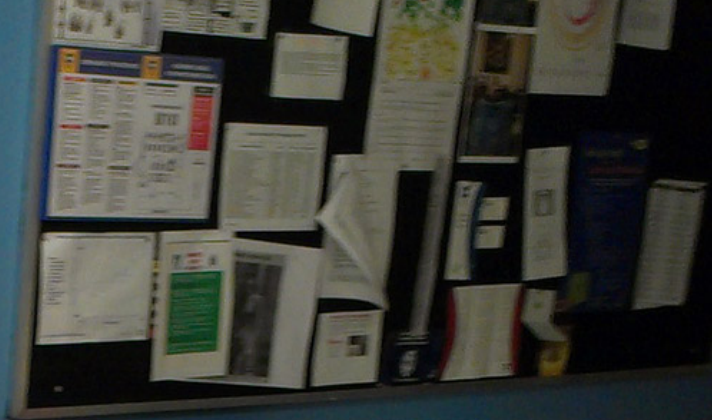
Animations







PLEASE DO NOT  
DO NOT OBSTRUCT  
DO NOT RE-OPEN





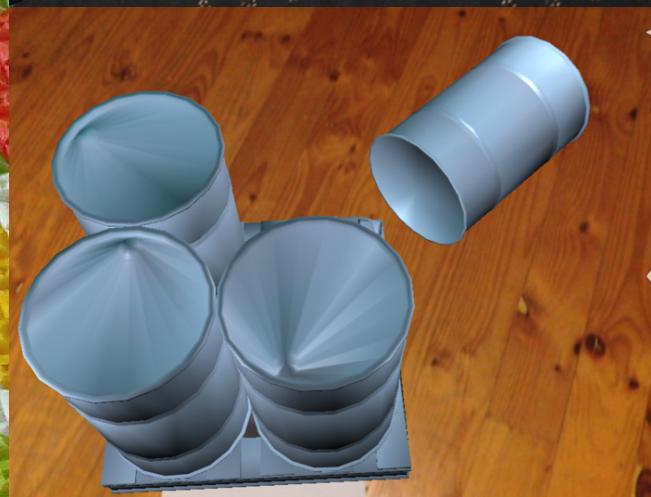
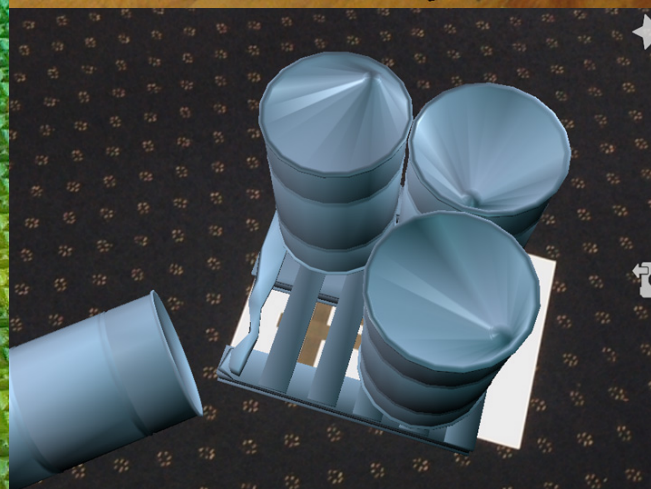
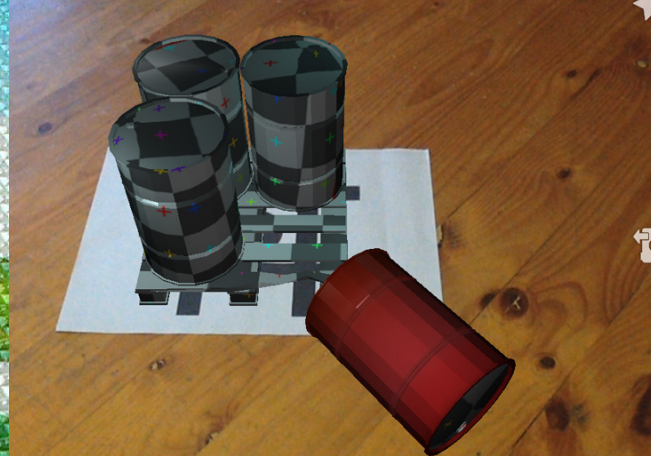




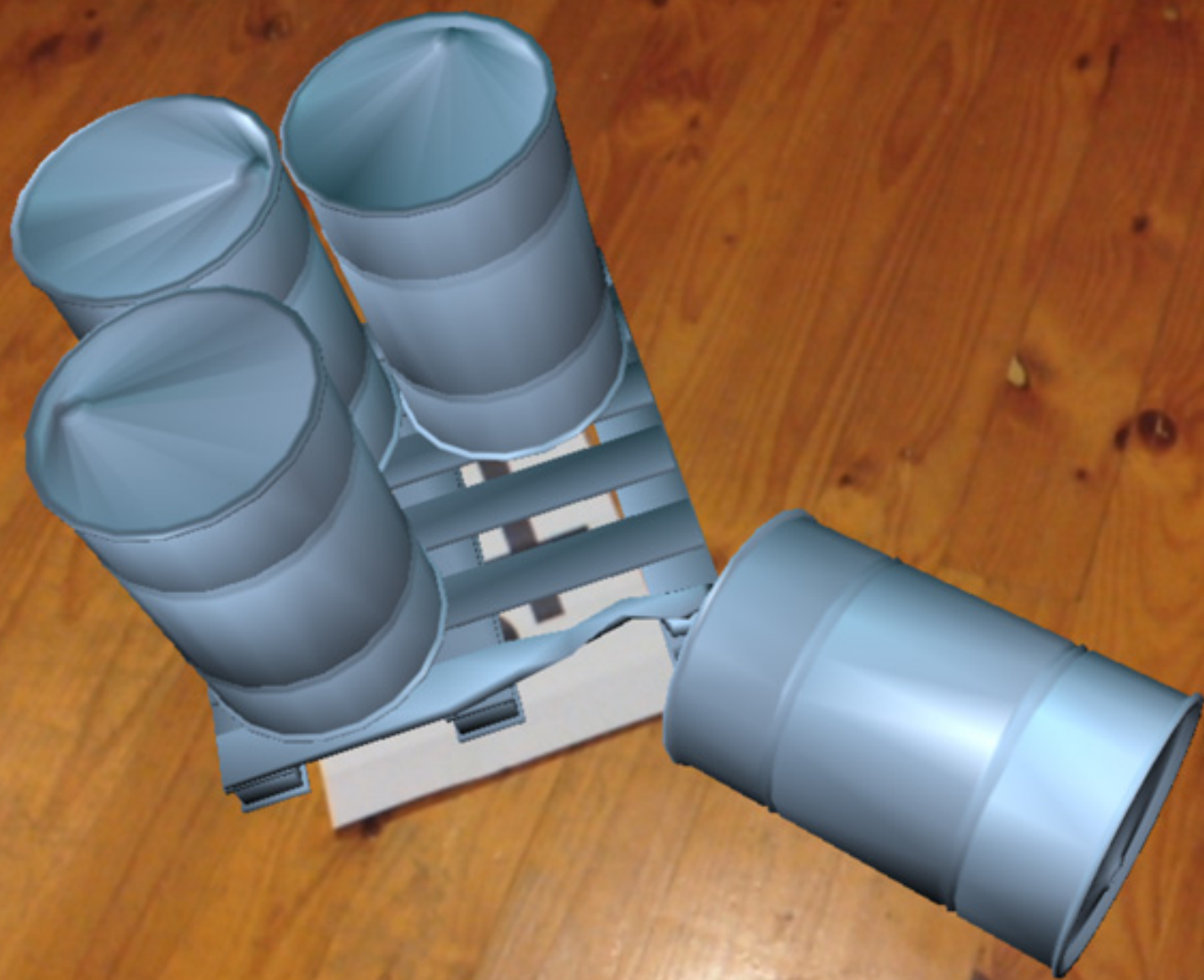






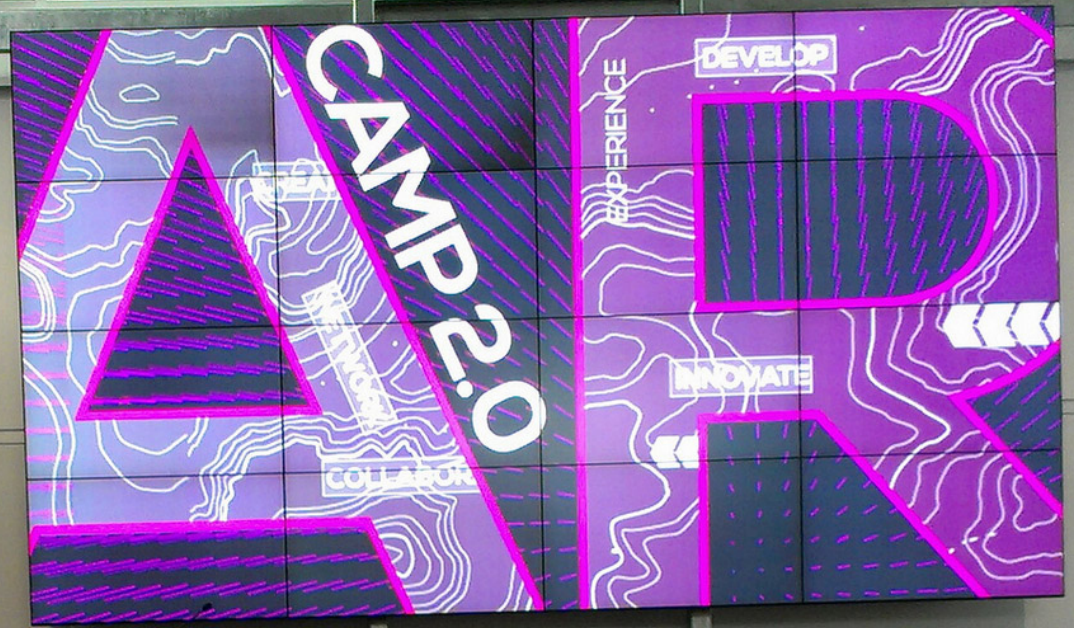




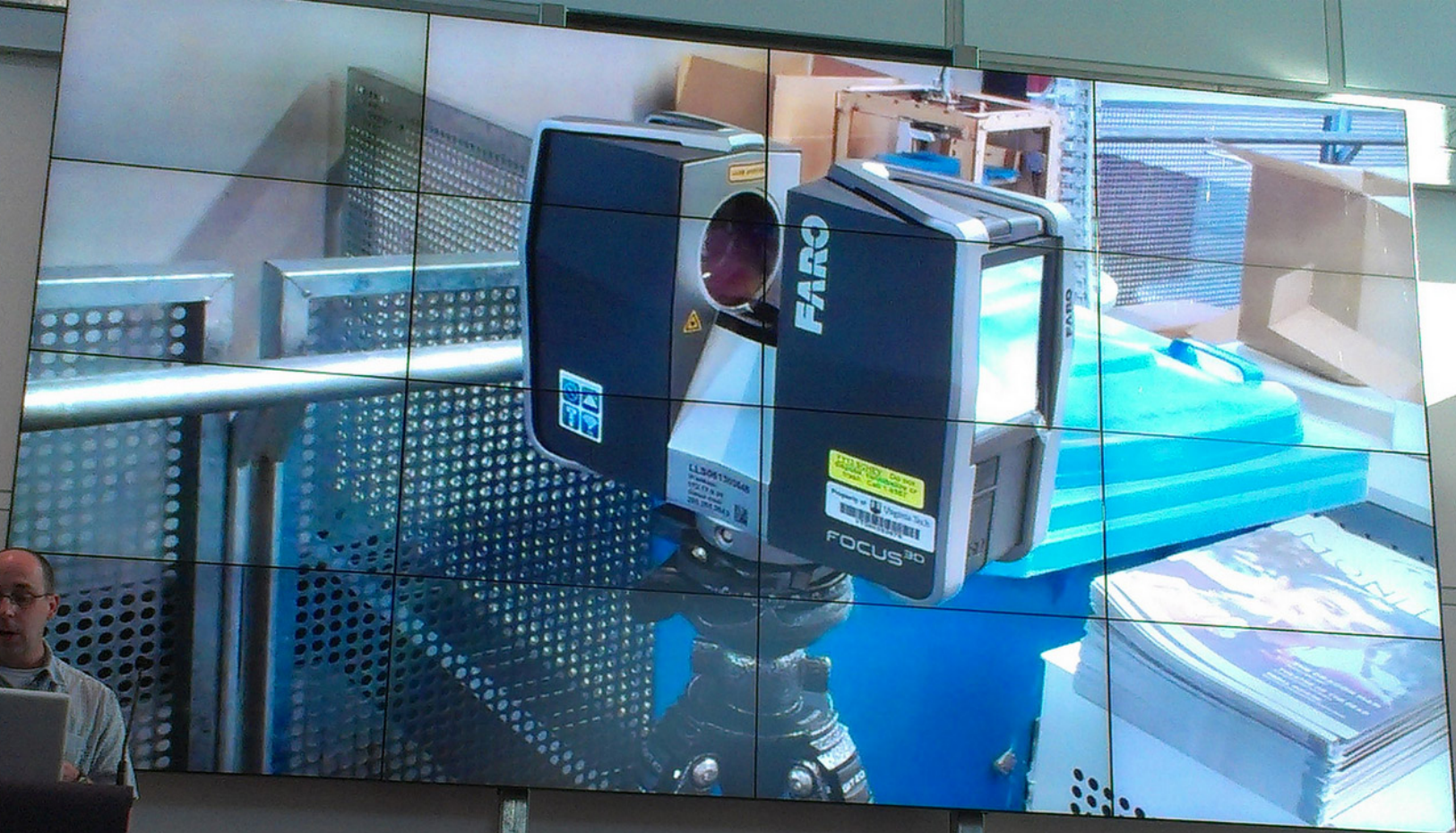




# Research







CREATE  
NETWORK  
COLLABORATE  
DEVELOP  
CHALLENGE  
INNOVATE  
CAMP 2.0  
JUNE 20 & 21, 2013  
PACIFIC CENTRE, CALIFORNIA





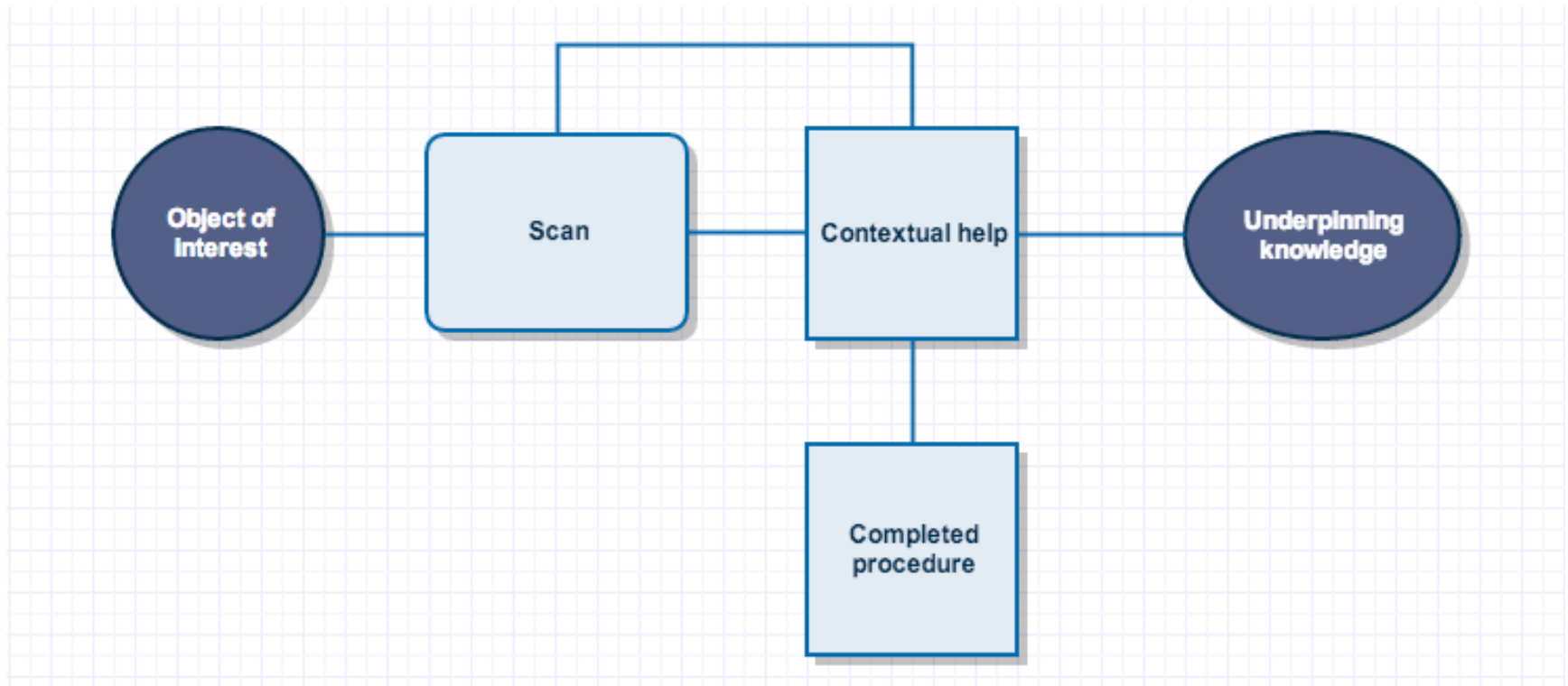
skype



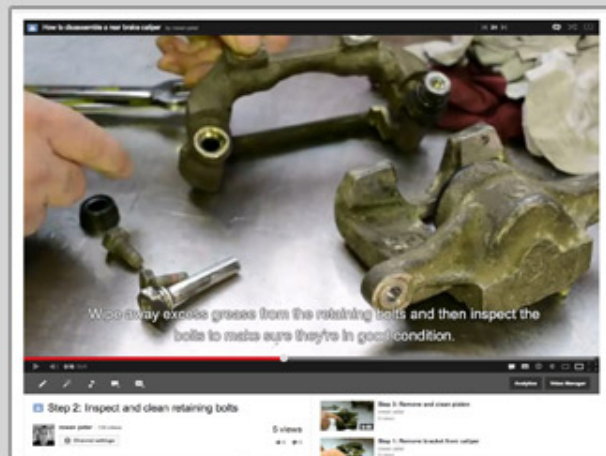
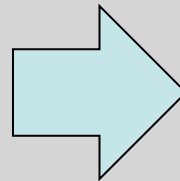
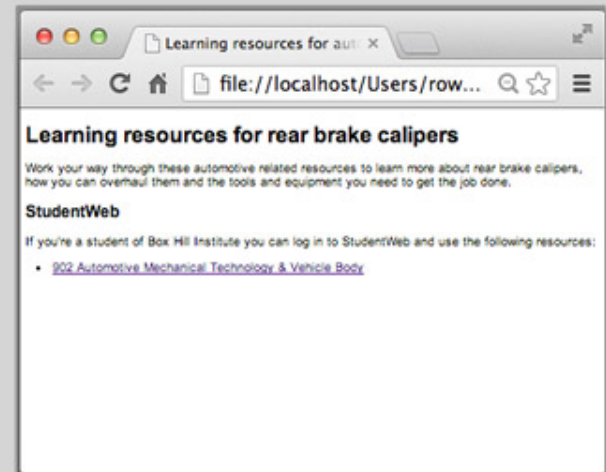
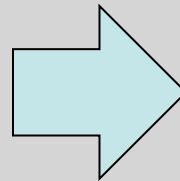
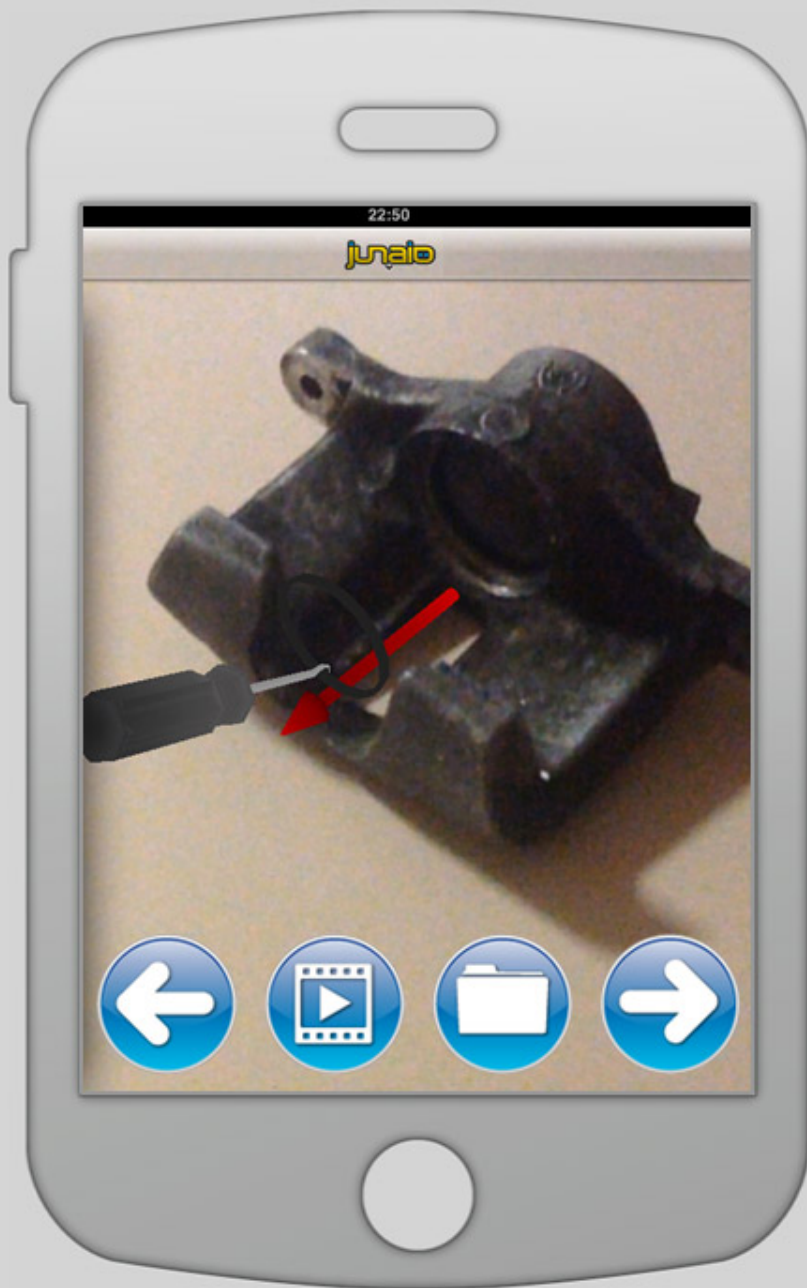


# Develop

# Augmented contextual instruction









Mapping in progress. Move the camera over the scene.

Map fill level

**100.0%**



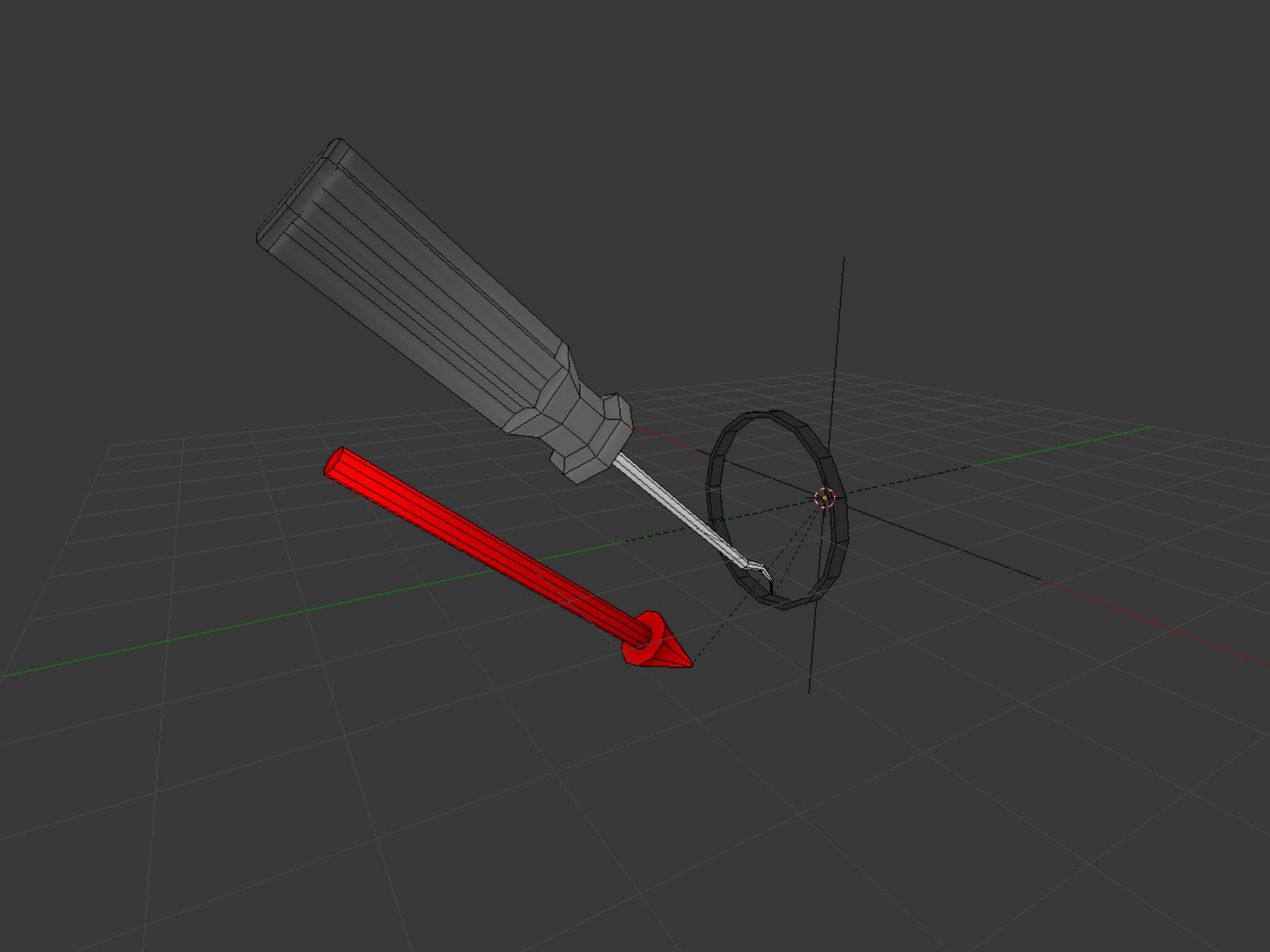
Home

Save

Restart









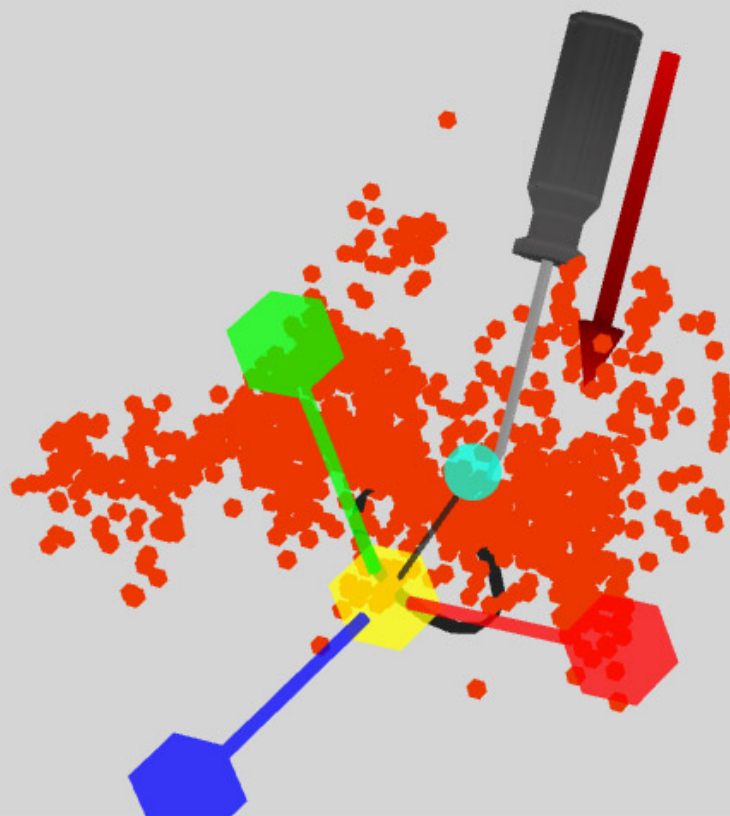




2D

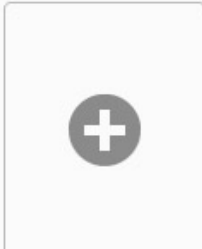
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3D



UI Designer

Trackables



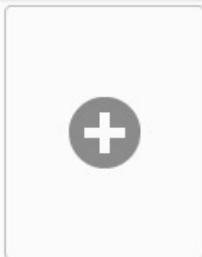
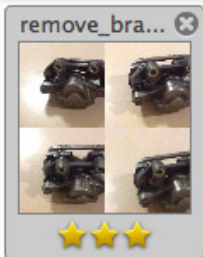
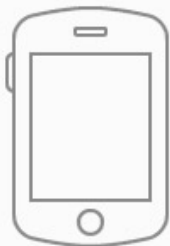


Back

Previous

UI Designer

Trackables







## Step 4: Remove piston seal from caliper

Rowan Peter for BeLS at BHI

This step shows you how to remove the piston seal from a rear brake caliper. It is the fourth and final step in disassembling a rear brake caliper.

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**How to disassemble a rear brake caliper**
by rowan peter

2/4

Wipe away excess grease from the retaining bolts and then inspect the bolts to make sure they're in good condition.

0:18 / 0:41

Analytics
Video Manager

## Step 2: Inspect and clean retaining bolts



rowan peter · 124 videos

Channel settings

5 views

0 0

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About

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Published on 2 Sep 2013

This instructional video is supplementary material for the augmented contextual help I'm developing as part of my VET Development Centre Specialist Scholarship.

Remix this video!

Find out more about my augmented contextual help and the work I'm doing for the scholarship on my blog.



**Step 3: Remove and clean piston**

rowan peter  
2 views



**Step 1: Remove bracket from caliper**

rowan peter  
5 views



**Step 4: Remove piston seal**

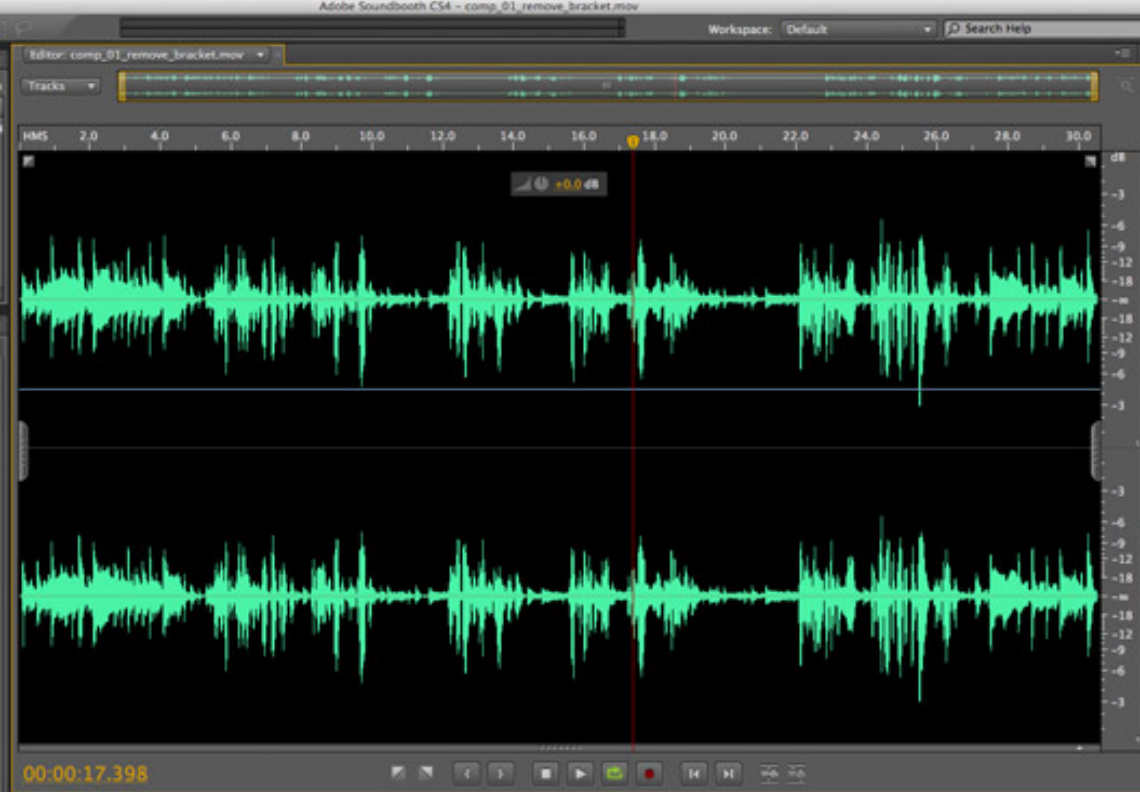
rowan peter  
1 view



**step 01 instruc 640 x 424 H264 60 v01**

rowan peter  
3 views





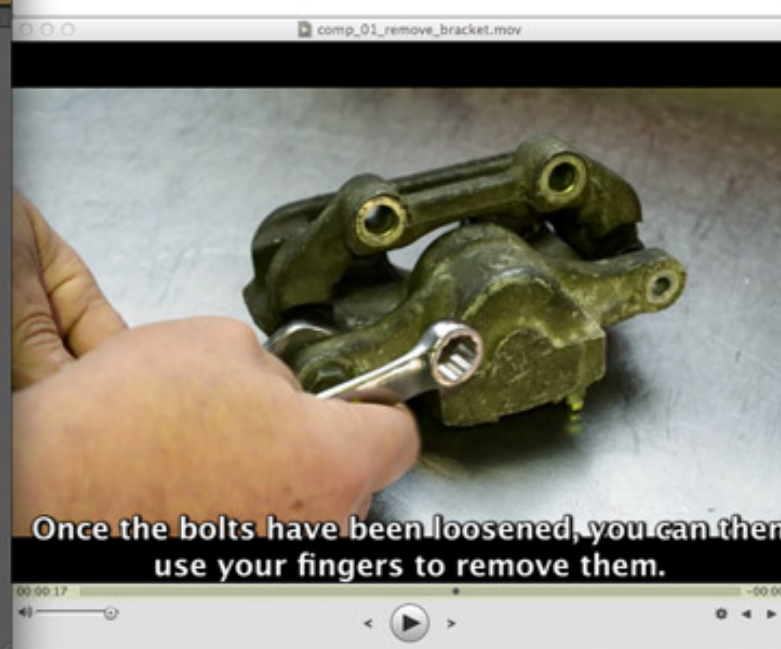
1  
00:00:00,000 --> 00:00:03,000  
[Incidental music]

2  
00:00:05,271 --> 00:00:11,218  
The first step in disassembling a rear brake caliper is to remove the bracket from the caliper.

3  
00:00:012,078 --> 00:00:14,393  
Use a spanner to loosen the retaining bolts.

4  
00:00:15,468 --> 00:00:19,686  
Once the bolts have been loosened, you can then use your fingers to remove them.

5  
00:00:22,011 --> 00:00:26,713  
Once the retaining bolts have been removed, you can slide the bracket away from the caliper.



# Next steps

- Determine if creating an app is the best way to ensure consistent placement of UI. If so, do it.
- Depart from use of proprietary augmented reality platforms and pricing paywalls. Pursue development of device and platform agnostic augmented contextual instruction and additional augmented reality experiences for display in web browsers that support HTML5 (JSARToolKit with the WEBRTC getUserMedia API).
- Explore the use of XBOX360 Kinect as an alternative to Metaio Toolbox to capture 3D point cloud data (and 3D geometry) required for image and object recognition
- Explore use of wearable technology such as Google Glass to provide hands free contextual instruction without obstruction or interruption. For example, the learner would no longer need to put down their tools or object of interest to activate next step or stage of the contextual instruction.
- Permit creation, customisation and submission of peer and trainer reviewed learner generated contextual instruction to BHI infrastructure such as Generic Competency Units and Apprenticeship Block
- Integrate augmented contextual instruction with existing BHI products such as Mobas and StudentDiary.
- Personalise learner's contextual instruction through analysis and aggregation of their academic submissions to BHI infrastructure.



# Project blog

<http://rowanpeter.com/tag/specialist-scholarship/>