

Industry in the Classroom

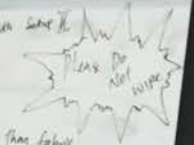
Deakin T&L Conference 2016

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Observations with same IL
Solution



AI ethics faster than fabric
in some cases fabric doesn't catch at all



To solve the problem, we go isolated parts
with only the section of reaching fabric express

Application



open only @
contact with fabric

SED402 – Adv Design Methodologies

A capstone subject in the final trimester of Mechanical Engineering

Students are given an open ended / ill-defined industry derived problem to solve

Students work in teams of four over 12 weeks to devise their best solution

Industry - Ford

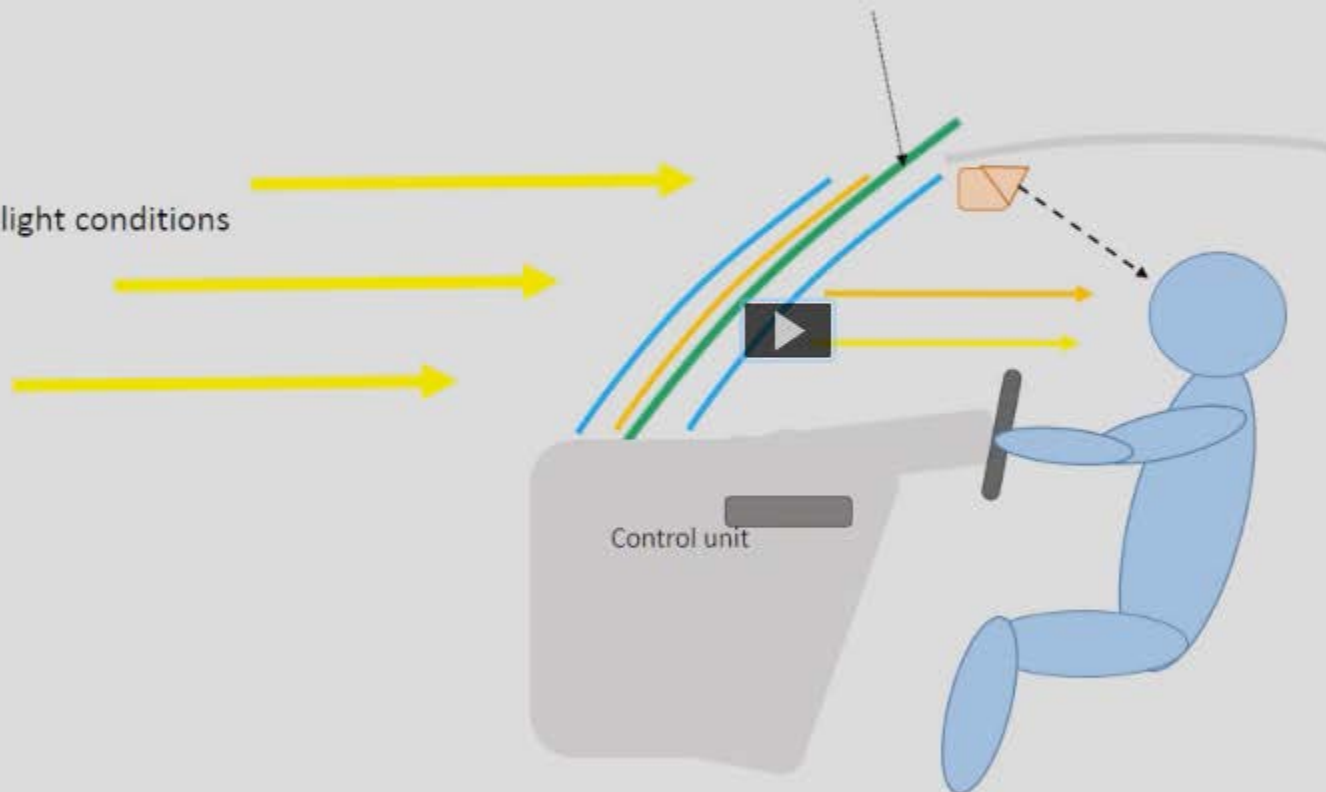
Reimagine, develop and prototype a new lighting system for domestic vehicles

To be mindful of current and future trends and technology in lighting

How will vehicles interact with people

OLED layer

Excessive light conditions



Control unit

Active electrochromic layer



Industry - Bellroy

To reimagine, develop and prototype a sternum and waist strap for backpacks for the urban traveller and commuter

To be a one-handed operation with intuitive use

Consider both male and female users



Process not Outcomes

Academic domain

the need to separate a “failed” project to that of a successful series of product development steps

Outcomes not Process

Industrial domain

the need to understand students are still learning and as such the outcome may have “failed”

Double Edged Sword

Industry expectations vs student expectations

Industry realities vs student realities

Research collaborators as industry partners

Industry Feedback

Disconnect between a student and what a 5 years post graduation can do – they are not the same

“The reality

Lots of teams got lost in details, without stepping out to ask if they were really solving the problems that need to be solved, and prioritising the more important problems.”

“Design

Push it further:

Don't just solve one problem. There are many problems. Play with several of them. Understand which ones matter the most, rather than just choosing any problem.”

Student Feedback (eVALUate)

“For 3 years I've been on a structured path where I'm either wrong or right and then something ambiguous like this comes up ... Feedback was conflicting and didn't help with creating a product for their company as much as creating a better product in general. To this day I'm still not sure what kind of product they wanted.”

Student Feedback - Evaluate

“Obtaining experience working with companies outside of Deakin was beneficial. Provided an idea of what product design for a client in the real world may be like for future graduates. Was a valuable experience.”

2017 and beyond

Becomes SED304 – Product Development

Ford will contribute three design briefs

Currently seeking a different SME to also engage

Students will use this as stepping stone to PD focused
FY / Capstone project