



Keeping It Real: Embedding Software Engineering Practice in the Curriculum



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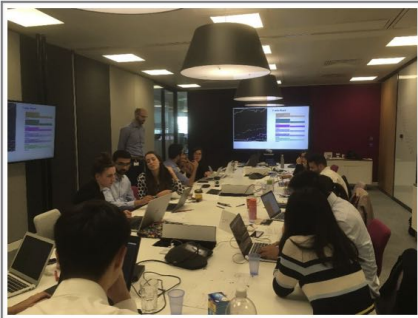




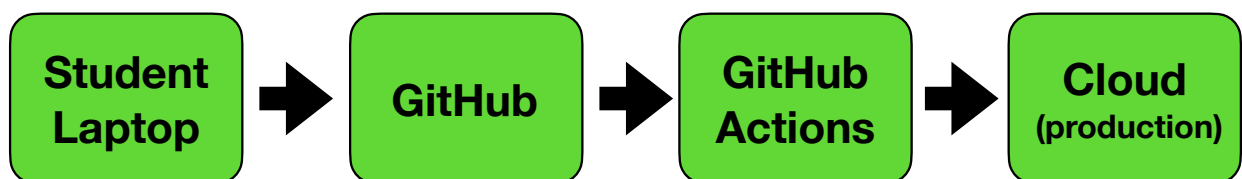
Environmental Fidelity

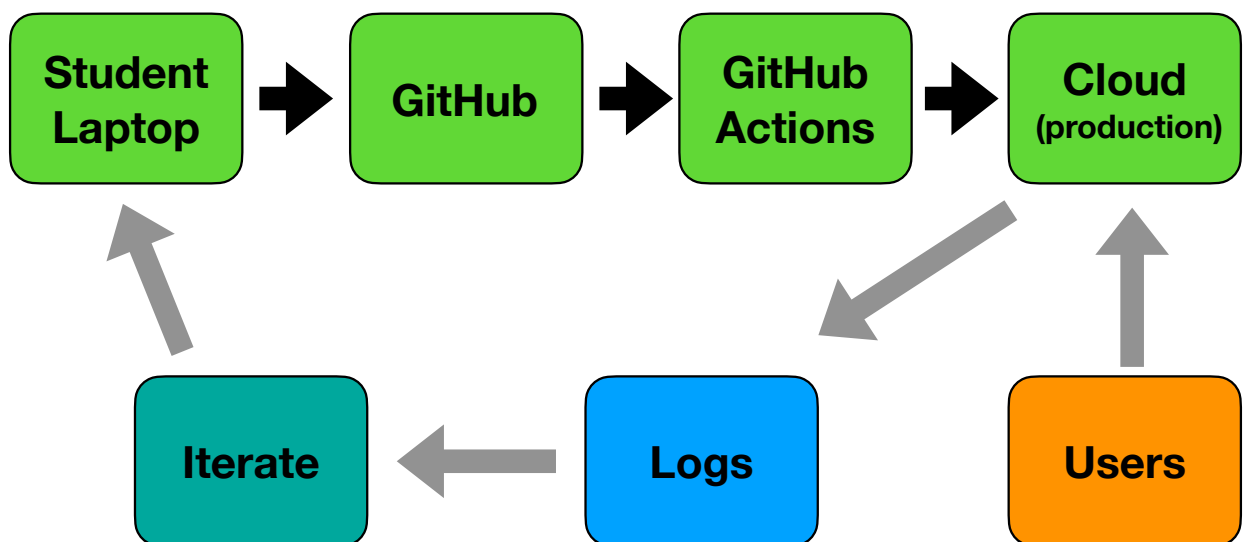
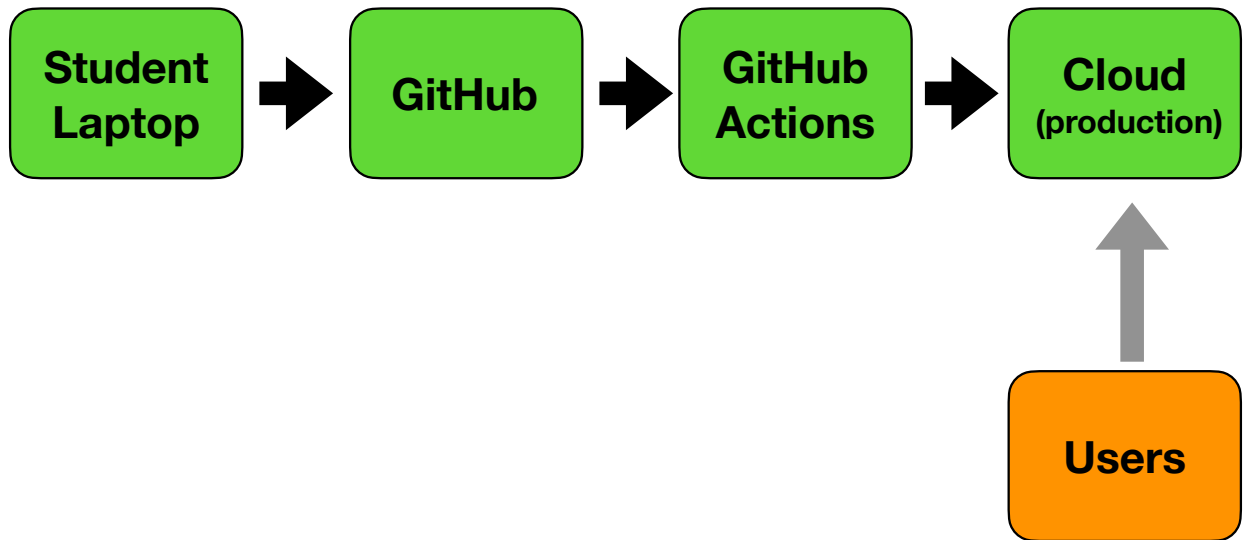


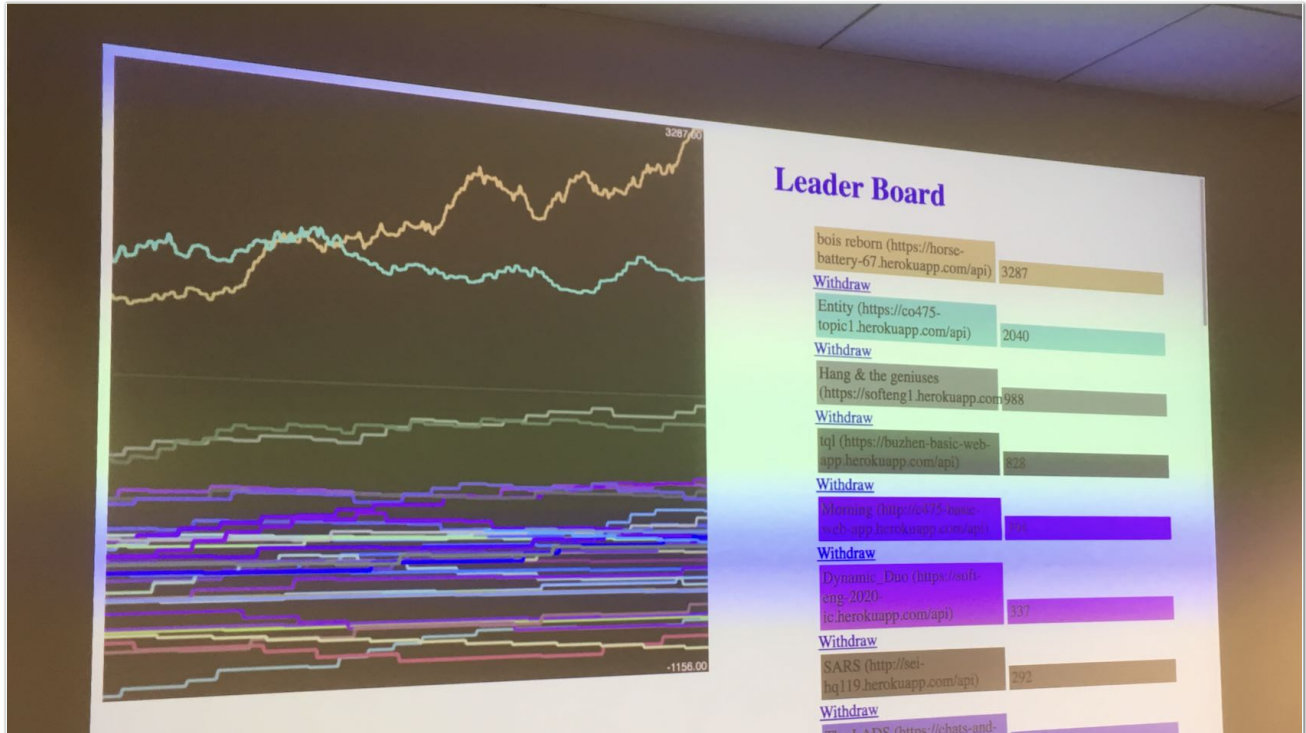
High Intensity Software Delivery



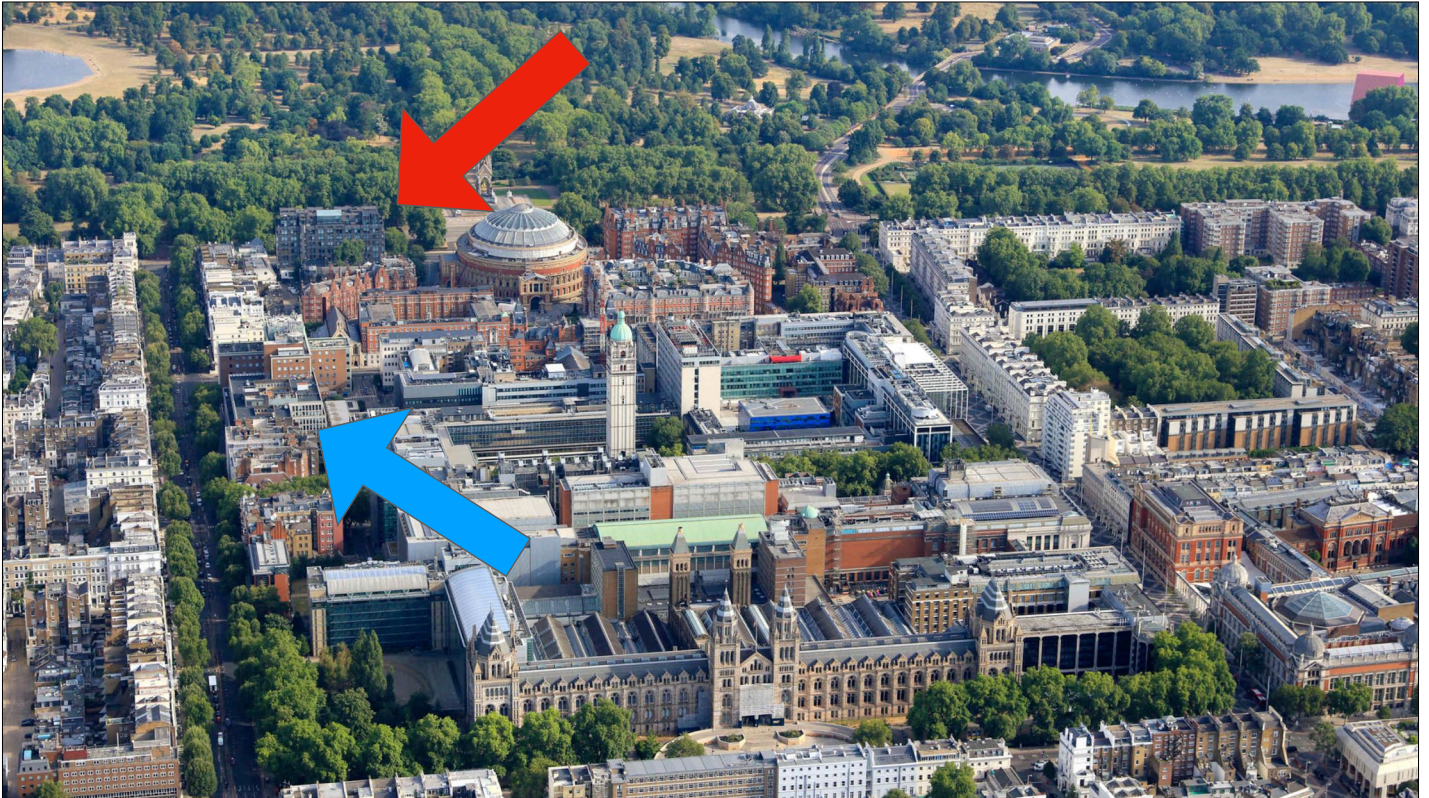
Matt Wynne







Authentic Consequences



Designing for Real People





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Service Design

MA

Service Design at the
Art

OWLS

24% OF CONSUMERS WOULD PAY TO RECEIVE PARCELS IN 1-2 HOUR WINDOW

USER APP

SEND AN ITEM TO ANOTHER CITY NO MATTER HOW FAR YOUR JOURNEY WE CAN FIND COURIERS TO RELAY YOUR ITEM TO IT'S DESTINATION

AFFORDABLE PRICES BY ALLOWING COURIERS TO SET THEIR DELIVERY AREA YOU WON'T PAY A PREMIUM FOR LONG DISTANCE DELIVERIES

ALERT

THE EVIL DOCKLING TO INVADE EARTH. WE HELP STOP THEM

Don't live near a

Can't take your c

Yet still want you exercise?

Sign up to our app

DO

Don't suffer in silence. If you are sleepless at night, ask the public for the resources you need.

Ask the public for the resources you need.

You get to decide what you need. Describe your need, when you need it.

Do ask for help. Get the resources you need.

Do ask. Do give. Do good.

FIND YOUR RECIPES NOW

REDUCE FOOD WASTE

With our state of the art ingredient selection and recipe recommendation system, no more half-used groceries going to waste! We help save around £60 per month!

PERSONALISED CHOICES

All of our recipes are provided based on your choices. Yes, we even take into account your dietary needs and allergies.

LESS TIME WASTED

58.7% of students spend 30+ minutes deciding what to eat. This is no longer a problem with our tailored results, so you can spend more time doing things you love.

Cooktionary

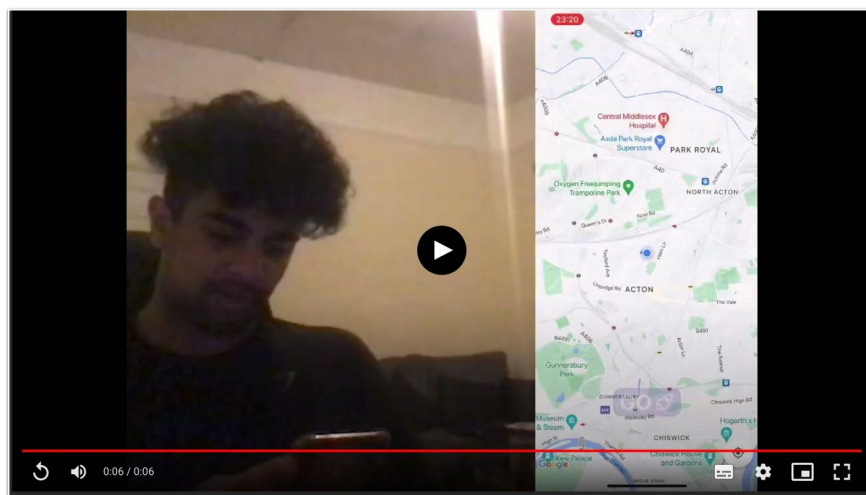
For Students and Young Professionals

LET THE COOKING BEGIN

Struggling to decide what to cook? Have ingredients you want to use but don't know how? We provide a personalised selection of recipes based on your needs

DRP-23.HEROKUAPP.COM

<https://www.imperial.ac.uk/computing/current-students/course-admin/noticeboards/second-year/projects/best-projects/>



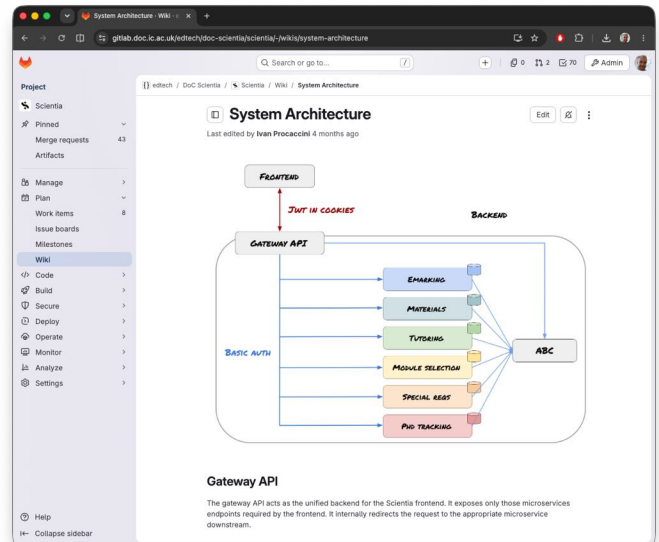
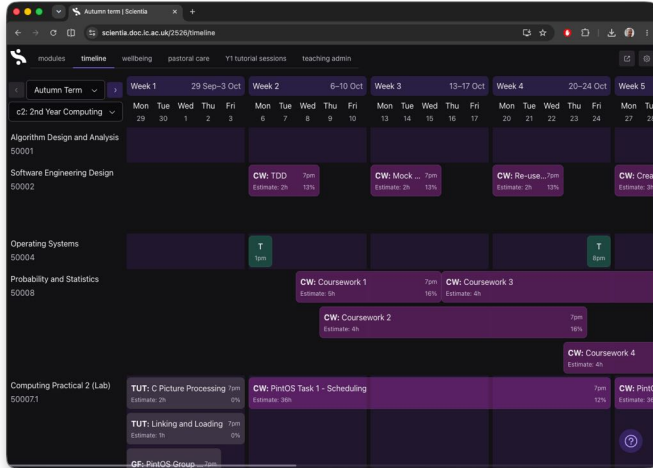
We asked students around the university for their feedback

The Environment Teaches

Pilot Plant



A Software Engineering Pilot Plant



Our Team



A New Teaching Role for Practising Engineers

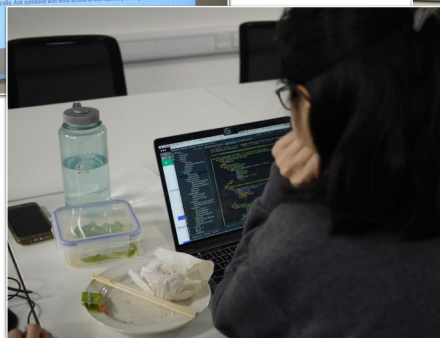
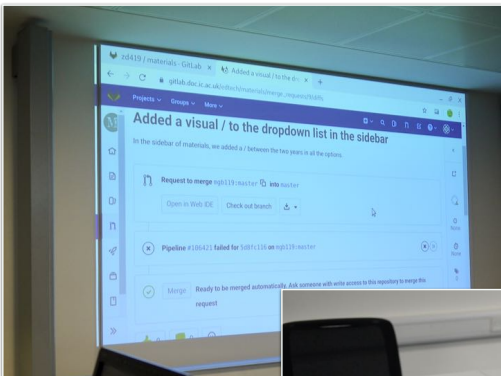
● Software Development

● Teaching

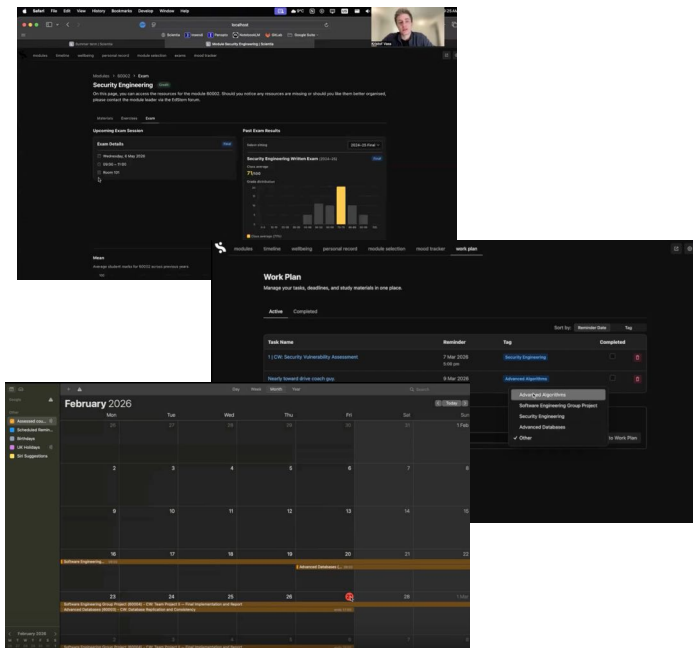
● Scholarship



Student Partnership



Making Contribution Part of the Course



Part 1: Think of a new Feature

Think about a feature or improvement that you could add to Scientia. It could be a student-facing feature, or a staff-facing feature. It need not be something very big, but think about how to best showcase the skills you have learned in this module (just making changes to the front-end might not allow you to demonstrate everything that you have learned).

The aim of the project is to design and implement your feature in a way that fits cleanly in to the existing application, with principled decisions and disciplined engineering practices.

Part 2: Plan and Document Your Design

Investigate the main parts of the current Scientia system and how they fit together. Think about how your new feature would fit in. What code do you need to add/change and where? What data flows would you need? Put together a design document with a description / sketch of what your feature will do, how it will work, and some architectural diagrams showing which part of the system are involved. Show where you plan to make changes, and anything that you plan to add.

Part 3: Implement Your Feature

You are free to fork, change and add to any of the repositories in the <https://gitlab.doc.ic.ac.uk/edtech/doc-scientia> GitLab group. You only need to fork the repos you plan to change.

Living Systems

Machine Learning in Production



Acute kidney injury (AKI) affects 1 in 5 people admitted to hospital as an emergency.

In the UK around 100,000 deaths each year are associated with AKI.

30% of these deaths could be prevented with the right care and treatment.



Andrew Eland

Externalising Feedback



From Judge to Coach





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Over to You for Questions...

