!!! Record this lesson !!!

Trends in AI

Course Conspectus

Navigating the AI frontier: A roadmap to tomorrow's tech trends

UNIVERSITY OF APPLIED SCIENCES AND ARTS

Elfde-Liniestraat 24, 3500 Hasselt, Belgium, www.pxl.be

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Course positioning

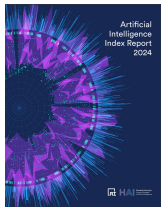
- First (and only) trends (or "*Capita Selecta*") course
- 3th year
- 1st semester (September - January)
- 14 weeks
- 3 ECTS (European Credit Transfer and accumulation System)
- 2h/w: Thursday 10u30 – 12u30 (@Corda 7 - iClassroom3)
- ± 3.5h/w: self study or project work

[INFO]
Capita Selecta: meaning "selected chapters" or "selected subjects.", to describe a course that offers a selection of advanced topics within a particular subject area.

Team (Apparently, there is only an I in this team.)

- Tim Dupont
- AI researcher @ PXL Smart ICT
  - Data Science (incl. GenAI)
  - Computer Vision
  - Smart Robotics
- Liaison between PXL Smart ICT & PXL Digital
- AI lecturer @ PXL Digital (This course, Smart Devices, …)
- Formal education
  - Industrial Computer Science
  - Applied Computer Science
  - Human Computer Interaction
  - Mobile Autonomous Systems and Cognitive Robotics

Course contents



- 🦾 **Trends in AI** 🦾
- Which trends to follow?
  - (Gartner) Hype cycle
  - Technology readiness levels
  - Sustainable Development Goals (SDGs)
- How to follow trends?
- Where to follow trends?
- How to keep track of all those interesting things
- Past trends vs Now
- Current trends
  - By yourself/as a group: Let's follow them!
  - Guest lectures

[INFO]
The focus in on the "***trends***" of what some might describe as *"the hype called AI"*, but others view it as the good old fashioned "*Where's the money at?*"

Types of assignments

- **[M]** Mandatory
  (To master the course materials.)
- **[R]** Recommended
  (Advised in order to reach the goals.)
- **[C]** Challenges
  (Ideal to get a deeper understanding.)
- **[F]** Fun
  (Fun extra assignments.)

Most assignments are without grading!

Evaluation

%	Periode	Type
50	June	Group project (individual assessment)
50	June	Oral Exam (closed book)
50	Aug/Sep	Individual assignment
50	Aug/Sep	Oral Exam (closed book)

[INFO]
Source: https://ibamaflexweb.pxl.be/BMFUIDetailxOLOD.aspx?b=1&c=1&a=86769

Group project [M|R|F?|C!]

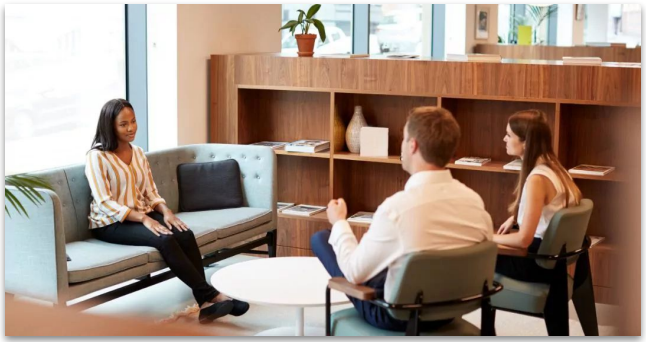
- **Small groups*** of 3-ish (Same as MLOps, Smart Devices)
- **Goal**
  a. To assess your practical trend following skills
  b. Do real-world trendwatching / research
  c. Create learning goals for the course (for all other students!)
  d. Communicate the trends to others
  e. Give feedback to other teams on goals and content.
- **Assignment**

  1. Dive into an AI trend you want to learn more about
  2. Create content and goals about it.
  3. Share the knowledge (to students & possibly researchers!)
  4. Give feedback to other teams
  5. Receive feedback (from students & possibly researchers!)

- **Start**: 03/10/2024 - **Deadline**: 18/12/2024 @ 23h59!
- **Project defence**: Trend talk (19/12/2024)

[INFO]
Solo “groups” are allowed if you’re aboard, a researcher, a working student, …

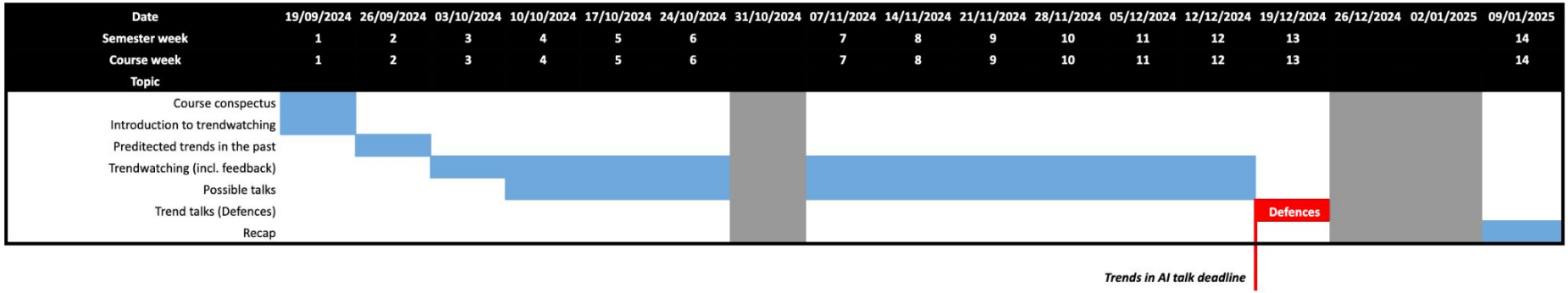
Oral exam [M|R|F?|C?]



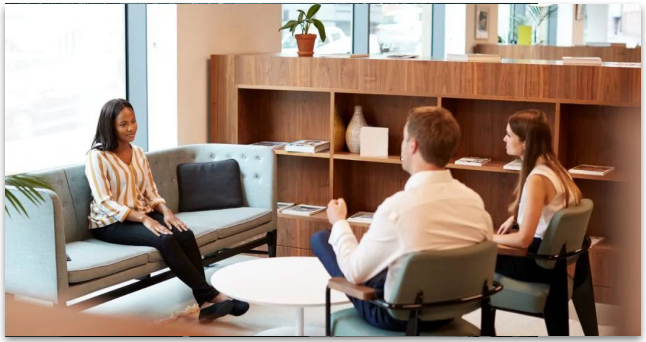
- Closed book oral exam
- No memorizing of formulas or code needed!
- **Grasp all the goals!**
  Understand/Know **all goals defined by all the groups in the knowledge base.**
- **Big picture thinking**
  Apply the course materials in real-world/other settings, no real code required.
- **Comprehension over memorization**
  It's important to know the 'what', 'how', and 'why', rather than just regurgitating the course materials!
- Each presentation & the KB has explicitly defined goals
  → *These **are used** to create the exam questions!*

[INFO]
Researchers are exempt from this oral exam.

Schedule


Date
19/09/2024
26/09/2024
03/10/2024
10/10/2024
17/10/2024
24/10/2024
31/10/2024
07/11/2024
14/11/2024
21/11/2024
28/11/2024
05/12/2024
12/12/2024
19/12/2024
26/12/2024
02/01/2025
09/01/2025
Semester week
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Course week
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Topic
Course conspectus
Introduction to trendwatching
Preditected trends in the past
Trendwatching (incl. feedback)
Possible talks
Trend talks (Defences)
Recap
Defences
Trends in AI talk deadline

Guest lectures

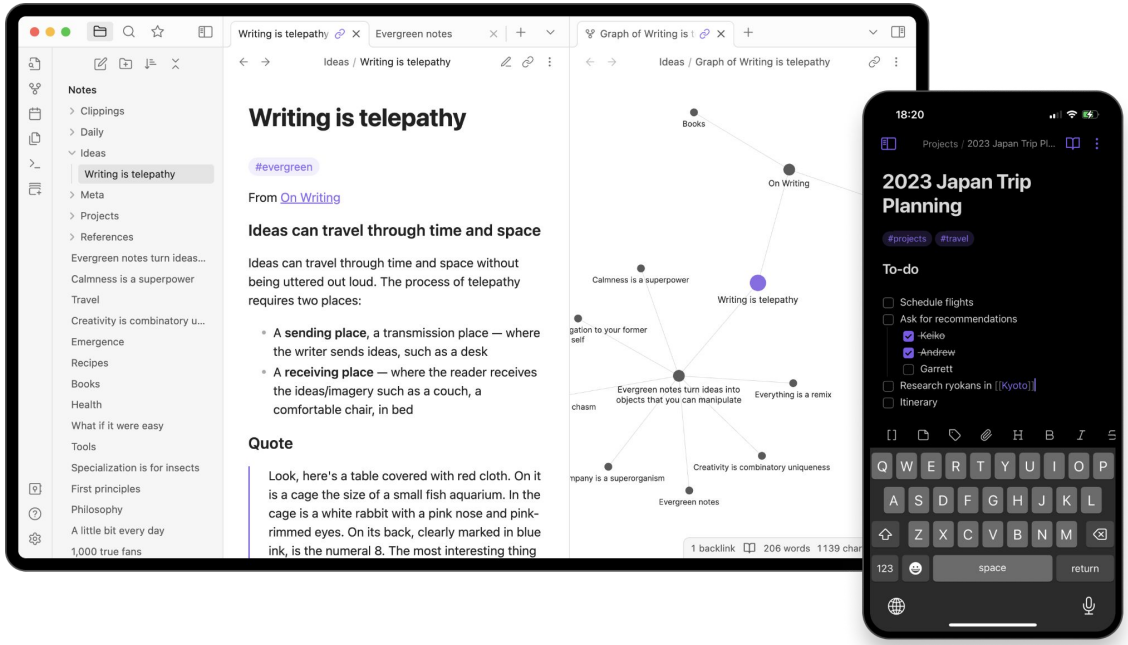


- Talks by people from the industry or research
- Wide spectrum of trends in AI & AI topics
- **Extra input for topics, trends and goals**
- **Could be organized outside of the normal hours**
- Open to other seniors (lecturers and researchers)
- Could be open to other students (TBA)
- Hopefully open to others companies…
- Could be a Corda Keynote
- **Schedules: TBA!**

Software

- Git (GitHub)
- Obsidian
- Markdown

Obsidian (Free for personal use)



[INFO]

Source: https://obsidian.md Use free for personal use version! We will sync the content via git to a GitHub repository.

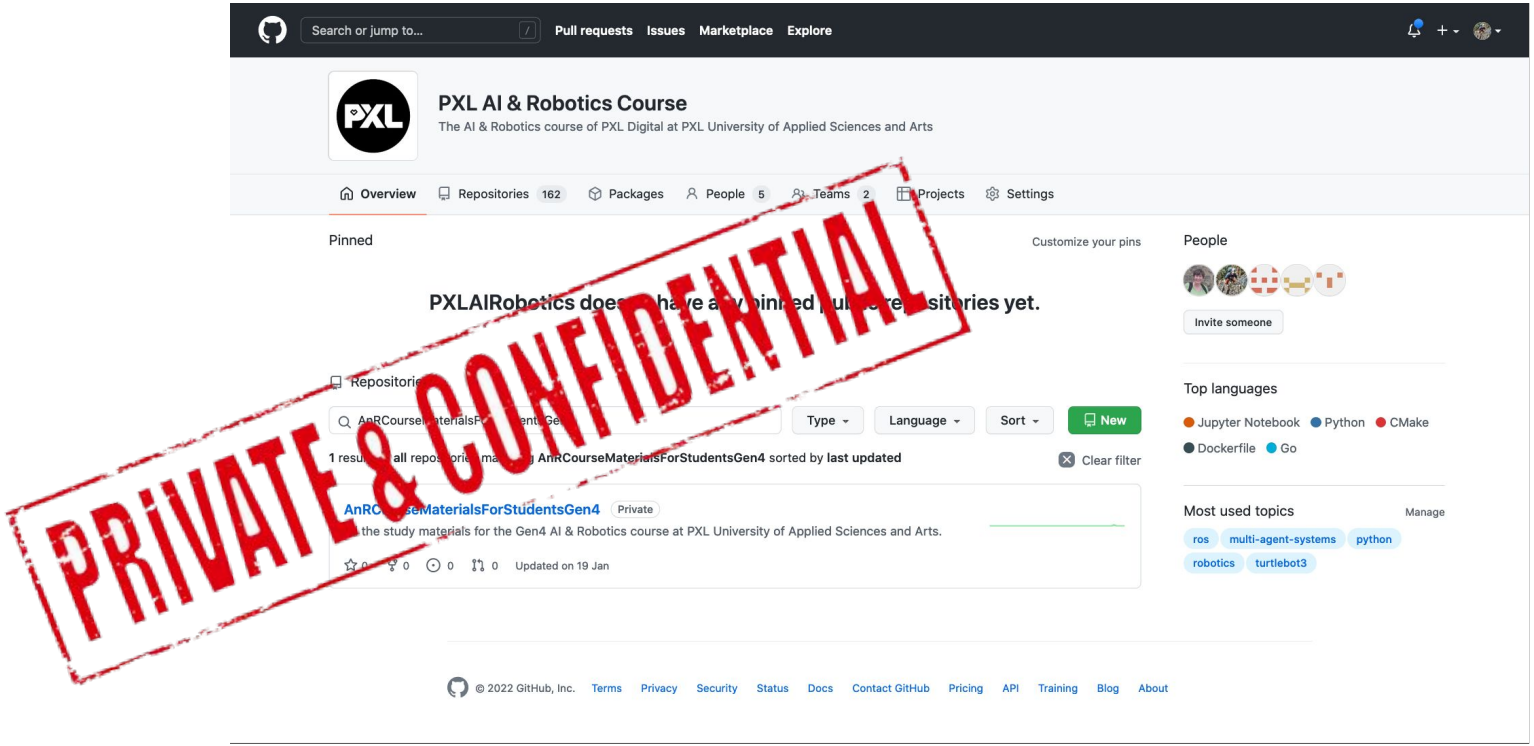
Microsoft Teams code

gzxk1o3

Enrolment + Github usernames

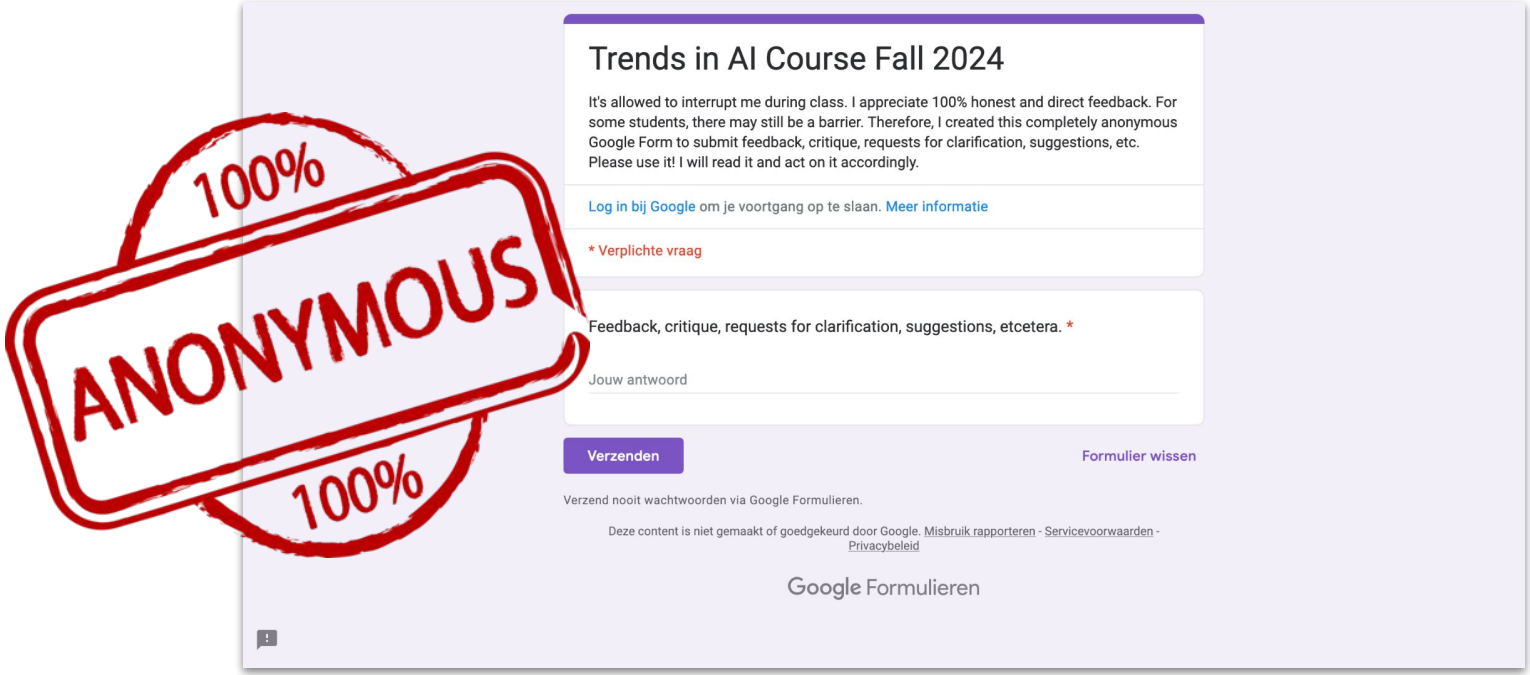
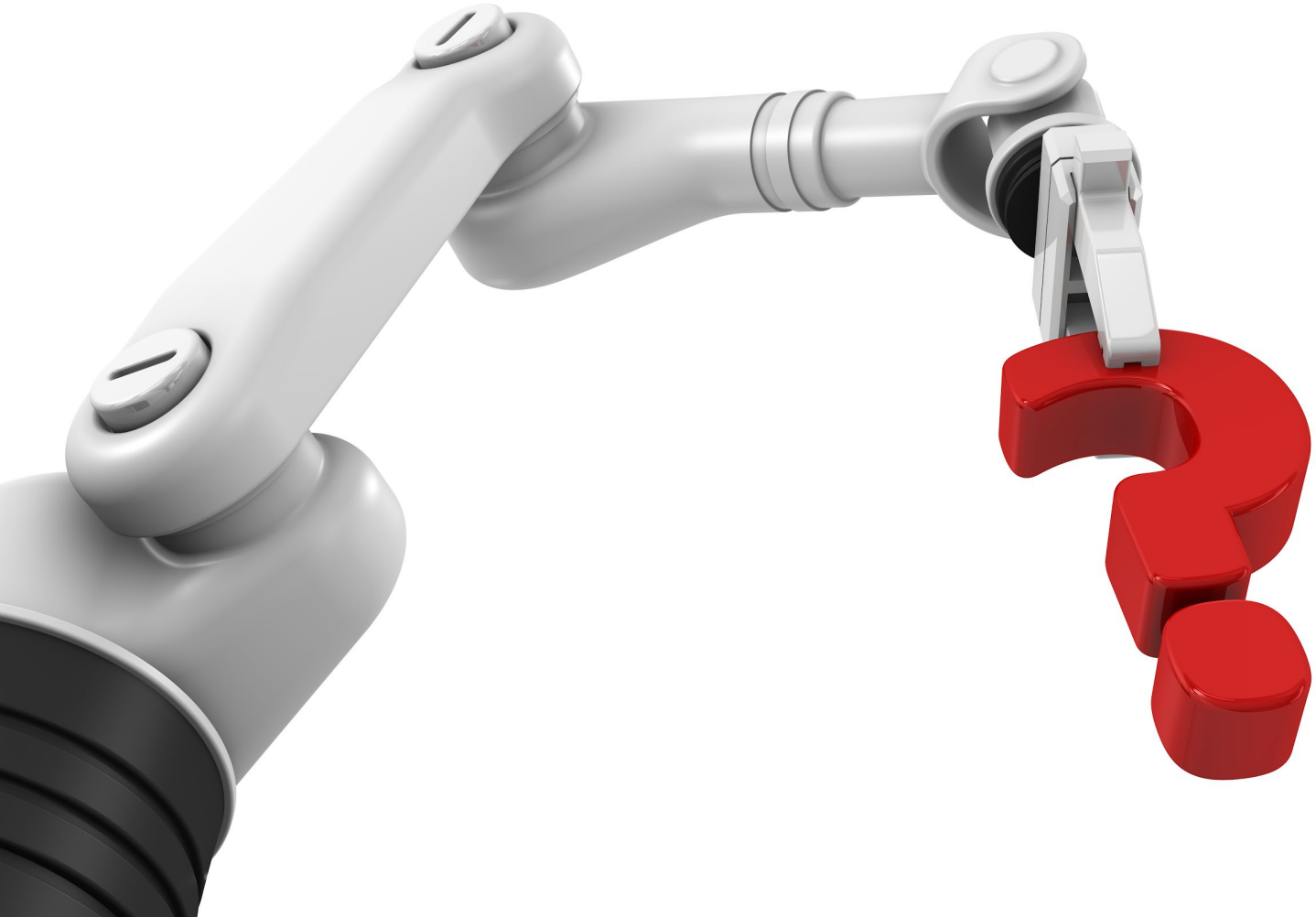
https://shorturl.at/YV2VN

Course materials



[INFO]
Source: https://github.com/PXLAIRobotics/TriAICourseMaterialsForStudents-2425

Anonymous form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