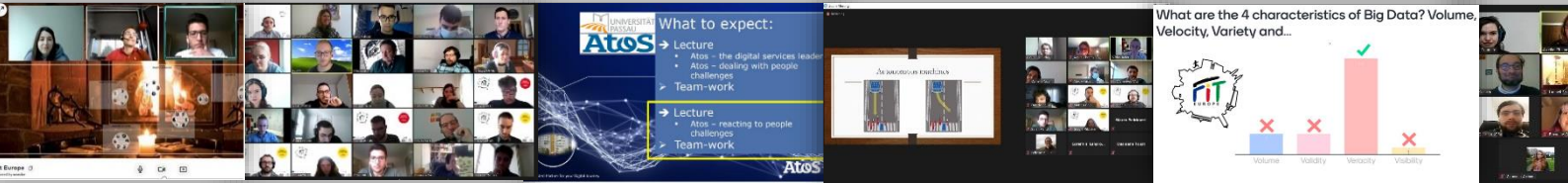


Summary Report - Fit Europe 1st Seminar

Big Data and its ethical/societal implications – “Should data rule tomorrow’s world?”

Hosted by Passau University 22nd – 26th February 2021



A relaxed discussion among Masters students and professional experts from Romania, Italy, Germany and France seated around a fireplace: an impossible scene in February 2021 at the very heart of the Corona-pandemic? Well digitally, anything is feasible!

And indeed on the 23rd February 2021 Kseniia, Alexandru, Salim and Davide are having a fireside chat with their two mentors from Romania and Germany while each sitting comfortably at home, in Lyon (France), Bucharest (Romania), Milan (Italy) and Passau (Germany). It is the first day of the Fit Europe Seminar hosted by the Passau University. On this day students, mentors and experts are gathering to get to know each other. They laugh, exchange ideas about this week’s topic “Should big data rule tomorrow’s world” and discuss how to organise themselves in order to work further together during the next days. If one of them leaves the discussion, he/she can simply move to another room, meet other participants and possibly join or start a new conversation: just like in any conference coffee break.

This real discussion– taking place in the virtual cosy living-room enabled by the digital tool Wonder –is **happening at the first one-week seminar organised by the University of Passau with its partners within the EU funded „Future IT Leaders for a Multicultural Digital Europe - FIT-Europe“ project.** The aim of this initiative is to give high performing computer science students from 4 European countries the chance to get an innovative European training. Fit Europe has been created thanks to the joint efforts and involvement of professionals from leading academic institutions (Universität Passau, INSA Lyon, Università Milano, Politehnica Bucharest) and their corporate partners (industry leaders ATOS and Engineering SPA, CITST IT Center for Science and Technology and Start-ups Hub La French Tech One).

Enabling interaction and networking among people who have never met in real life, who come from all over Europe, and who are diverse in terms of profile (students, academics or professionals from industry players) is **a challenge in the middle of a pandemic.** The seminar was initially supposed to take place at the University campus in Passau, where visiting students and professionals would have been welcomed and accommodated for the duration of the one-week seminar. But as the pandemic progressed, new scenarios had to be envisaged, leading also to hybrid solutions depending on the various countries’ limitations: for instance, whereas in Passau, everything has to be digital as students are not allowed to come to the Campus, in Lyon participants gather in a meeting room at INSA and collectively attend (with masks and social distance) the online event – in a hybrid format.

“Supporting as much as possible contacts and exchanges among our participants – not only among students, but also among students and professionals – was fundamental for us” highlights Axelle



Cheney, from the team of Professor Harald Kosch at the University of Passau (Germany), hosting this first seminar of the European Fit Europe project. *Actually when we asked our participants from France, Germany, Italy and Romania: what do you expect the most as a result of this event? The top answer that came out was: to get to know new people. And we offered the possibility to meet very various people, not only in terms of nationality, but also of generation and background.* Indeed, Fit Europe does not only support students to meet among themselves, it also stimulates real exchanges and joint work with external experts as well, coming from various fields in academia as well as from the private sector.

Indeed, the fit Europe Passau Seminar is not a usual academic meeting, where students exchange with other students and academic professors, but a one-week package of training on various issues with various professionals. As the development of data will be a future issue affecting not only the technological development of artificial intelligence and computer science, but the whole society, **the Passau seminar is built so as to provide students not only with technological skills related to the latest innovations in artificial intelligence and big data, but also with “soft skills”,** through the inputs provided by experts in law, in humanities as well as in human resources and the development of business strategies. And it followed a really innovative and interactive format that combined presentations, exchanges and joint work among international students and experts.

Thanks to this diversity of approaches, different fields and questions were discussed, hence **widening the academic approach usually offered to computer science Master students, and opening their knowledge and skills on ethical, societal, legal and even business and human resources management issues.** As a result, Fit Europe students and professionals discuss about how AI is having an impact on our society’s values, a few hours later about diversity and multi-generational issues in the workplace, before addressing in depth the problem of liability and rights for AI within autonomous driving. All **subjects not only important for IT specialists but also for the society a whole, for which our society’s future leaders should be prepared.** And while mixing professors, students and professionals, we observe that the participating students are not the only ones who benefit from such cross-linking conversations: also the academic and industrial partners discover new angles for tackling these issues, through their exchanges with these promising students. *“What an honour! Thanks for having the team of ATOS today in FIT Europe program and speak about people challenges in the modern world.”*, tweeted enthusiastically the ATOS team, after a very interactive session with Fit Europe participants on the human resources management impact of the current digital revolution, and what skills managers will need to have in the future.

Gathered in 5 international teams (each team included one student per participating higher education institution), participating students also worked the whole week to develop a project answering the overarching seminar question of “Should Big Data rule tomorrow’s world?”. *“Each team was invited to go deeper into a specific sub-question”,* explains Ophélie Coueffé, deeply involved in the organisation of the event in the team of Professor Kosch at the University of Passau explains: *“For example, they could work on: is digitalisation a poisoned gift for the environment? Are smart cities and autonomous driving to be wished for our short-term future? Is the digital era, an added-value for tomorrow’s Europe? Is data-driven sustainable development possible or utopic? What are the lessons from the Covid-19 crisis for the role of big data on healthcare? And do AI and Big Data facilitate or hinder diversity in our society? But students could also choose another sub-topic, and the results from the 5 international teams of students reflected a real diversity of approaches.”*

For this task, the students were not left alone: each team was helped by a pair of two “mentors” who guided them in their project. These mentors included academics from the 4 participating institutions (Prof. Harald Kosch, Dr. Armin Gerl, Dr. Wiem Fekih Hassen, Claudia Heudecker from Passau University, Prof. Lionel Brunie from INSA Lyon, Dr. Andrei Olaru and Dr. Alex Awada from Politehnica Bucharest, Dr. Stelvio Cimato from Uni Milan), but also professionals Roland Wossidlo from ATOS and Dr. Amélie



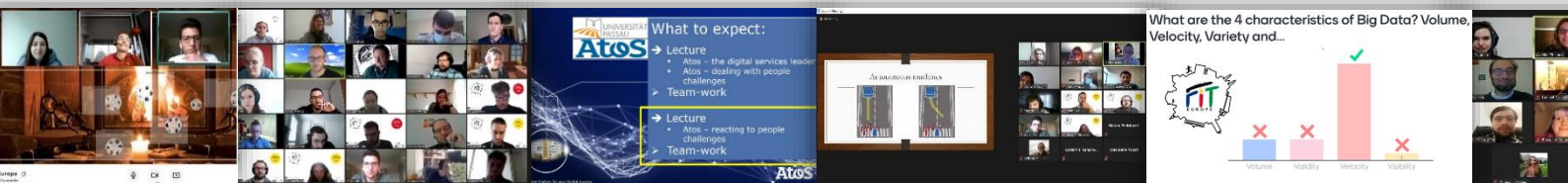
Cordier from La French Tech One, the two industry partners deeply involved in this seminar. **“Some students worked through the night and sent me emails to ask me questions at 2 o’clock in the morning”** enthusiastically highlighted Amélie Cordier. *It is amazing and really great how they got involved!*

At the end of the week, all students’ teams presented their work in front of the Fit Europe participants. **“We had no idea what the students would deliver”** confess Dorothee Brac de la Perrière, who manages the Fit Europe project at INSA Lyon. **“The results were stunning, both in terms of the quality of what the students proposed, as well as regarding the originality of their presentation. Some even developed a whole separate website around their proposal. We were all speechless!”**

Despite the competitive set-up and even if the “yellow team” was assessed as the team having presented the best project work by the independent jury, made of Prof. Elif Kavun, Professor at Passau University, Alexander Treml CEO from the German company Regiothek, and Frédéric Prost, professor from Université Grenoble Alpes, the friendly and joyful atmosphere accompanied the students’ presentations on the last day of the event. **“When I see our students from Lyon together with students from Bucharest, Passau and Milan reporting in a same team after having worked together for a whole week, this is really Europe”** enthusiastically notes Prof. Lionel Brunie, head of the computer science department at INSA Lyon. **“Our students learnt a lot from the interactions they had with the other students and with the researchers and industry experts they met during the seminar week.”**

On the last day of the Seminar as one of the students’ team showed that the digital format for a seminar such as Fit Europe has less negative impact on the environment than a seminar “in real”, one professor asked smartly: **“But finally what you would prefer: that the next Fit Europe seminar takes place face-to-face in the beautiful city of Lyon or in digital format?”** The answer to this question is not unanimous nor straight-forward: our future IT leaders will have to intelligently tackle this diversity, and not forget the human perspectives digitalisation will never replace.

After this amazing start we are looking forward to the second Seminar of Fit Europe that will take place in June 2021 hosted by INSA Lyon. On their campus....or in the digital format!



Further Information:

- [Background – the Fit Europe Project](#)

The Future IT Leaders for a Multicultural Digital Europe (Fit Europe) Project is an EU-funded project aimed at designing and implementing an innovative transnational curriculum for computer scientists in Europe.

Fit Europe is an output of the cooperation from Passau University (Germany), INSA Lyon (France), the University of Milan (Italy) and Politehnica Bucarest (Romania), together with European industry players active in Artificial Intelligence and Big Data: international players ATOS Germany and Engineering Italy, start-up hub La French Tech One Lyon Saint-Etienne, and the SME specialised in robotics CITST.

Launched in October 2019, the three-year project aims at answering the burning questions: what will be tomorrow’s challenges future IT leaders will meet? and how can we best prepare them for these tasks?



“This is a very exciting project. In Fit Europe, we train those who will be IT leaders tomorrow, so that they build the future digital society and are able to meet the new challenges it will raise.” enthusiastically announced Professor Lionel Brunie, Director of the Computer Sciences Department at INSA Lyon, leading the “Fit Europe” Project, at the launch of the initiative.



The project’s added-value is twofold. First, it proposes an innovative content as it prepares students for future burning issues, such as: what will be the place of robots in a multi-generational society? How will Big Data be compatible with ethics? What will be the business interest of block chains? How may “Internet of things” respect people’s private lives and trust in IT? Or what innovations may rise from these new technologies and how will we address the new societal issues they raise?

But Fit Europe is also innovative in terms of how these themes are dealt with together with the students, as it relies on a strong connection with IT economic players. In Fit Europe, industry and academia are working hand in hand not only when designing but also when implementing the program. Hence, in Fit Europe, students are not only coached by academics, but also by players active in the IT business, with whom they carry out projects connected to real challenges.

For more information: <http://fit-europe.eu/>

- After the Fit Europe Passau Seminar: Utopie Europa, Digitale Utopie 2021

Right after the Fit Europe Passau Seminar, a bunch of French and German Fit Europe students took part in the German competition “Utopie Europa 2021”.

Launched by the Institut français, the French-German University, in cooperation with the European Parliament Liaison Office and the European Commission Representation in Germany, the aim of “Utopie Europa” is to encourage students from German Universities to think about the future Europe they want to live in: students are expected to collectively discuss challenges faced by the EU and design solutions to be put forward in Brussels. Nine projects have been selected this year in Germany; the University of Passau is the only selected University in Bavaria.



This year’s theme “Utopie Europa, Digitale Utopie?” was aligned with the overall topic covered in the Fit Europe Passau Seminar. It was therefore logic to invite Fit Europe students to take part in this initiative, and to discuss the topic of the Fit Europe Passau seminar at the European level.

As a consequence, a discussion was organised with Philipp Slusallek on “should data rule tomorrow’s Europe” in the week following the Fit

Europe Seminar: **“these are real life problems we are facing today. And these will affect your generation much more than mine! So you need to solve them”**, called Prof. Slusallek in front of **80 students and professors, coming from all over Europe**, on the invitation of the University of Passau for an “Utopie Europa” debate on 2nd March. Prof. Philipp Slusallek is a **key and prominent European expert** on Artificial Intelligence and Ethics: he is the scientific Director of the German Research Center for Artificial Intelligence (DFKI) and Member of the High- Level Expert Group on Artificial Intelligence for the EU institutions.



The audience of the exchange was multinational and multidisciplinary: not only future ingenieurs and computer scientists from the University of Passau (Germany) and INSA Lyon (France), as well as from Politehnica Bucharest (Romania) and Universitat Milano (Italy), but also lawyers and ethicists from the University of Passau, host of the event. This variety of background was a challenge the European expert managed to meet very well, with both technical insights for those familiar to Artificial Intelligence and a deep philosophical reflection for participants further away from computer science.

Prof. Slusallek pointed out the difficulties when philosophers and AI specialists come together. He insisted on the necessary openness from both parties and the added-value from new viewpoints, in order to progress ahead. He admitted: *“we need to remember two important aspects when we look at the future: on the one hand, many elements still are to be discovered in Artificial Intelligence. On the other hand, we have to better control AI, so as to be able to give guarantees regarding its results.*

“For us, it was important to enable as much exchanges as possible between the students and Prof. Slusallek” explain the organisers in the University of Passau (Faculty of Computer Science and Mathematics, Chair of distributed information system). *“We wanted this event to be the students’ event, and to ensure a real exchange, for the benefits of all students joining.”* Indeed, after a very rich 30-minute presentation from Prof. Slusallek, a team mixing students from Passau University and INSA Lyon presented their own findings on the technical and societal developments in Artificial Intelligence and big data. They then raised concrete challenges: *“How to balance the protection of privacy with the benefits of gathering medical data to ensure successful AI solutions in healthcare?”*, *“or “How we can make data more tangible for the European citizens?”* Finally, students came up with concrete proposals on how AI and big Data could further develop. Prof. Slusallek enthusiastically reacted and gave them his feedback. As a result, the debate was rich and interaction *“at eye level”*: it encouraged students to ask their own questions to the prominent European expert, who took part very dynamically in this interactive exchange. He praised the students and acknowledged: *“it is great to see you have been working on these challenges: a lot of good ideas were presented today!*

Following the debate, a team of 4 Fit Europe students prepared the content (a three-stage presentation) for participating in the Utopie Europa competition on 22nd March: Kseniia Vasylieva, Manuel Lehner, Niklas Beierl (Uni Passau) and Corentin Laharotte (INSA Lyon) worked heavily to deliver a very high-quality contribution in the competition.

As a result, the computer science Master students Niklas Beierl and Manuel Lehner from the University of Passau made their best in this hard national competition: they reached the third place on the podium, beaten by the team of Humboldt University Berlin in the half-final stage.



With this performance, the University of Passau is very proud of its students. The University of Passau was the only Bavarian university selected in this tough competition. More information: <https://utopieeuropa.institutfrancais.de/preis-2021/>