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[AEGC 2023]

1. Do you want to share some interesting stories behind what you will present in AEGC 2023?

The presentation will focus on Quantitative Seismic Stratigraphy (QSS), which is an innovative way to visualize and characterize subsurface data. I am particularly attached to this theme because this is something I started to develop during my PhD with my supervisor, which then led to the creation of a research consortium called QSS that was supported by several industry sponsors over the last 4 years. It is very nice for me to see how a small idea at the start led to this big-scale project where I had the privilege to work with some brilliant students and amazing data on various case studies.

2. Is this your first in-person conference since covid? What are your expectations for this conference?

I actually had the opportunity to go in France last year to give a talk at an international conference. But in the case of AEGC, I look forward to touching base again with the australasian community and discuss with my peers on more “local” themes that are relevant to Australasia. I am also very excited to see the different talks and learn more about what is happening in the region.

[General questions]

3. For how long have you been a geoscientist/geophysicist? What do you enjoy most about being a geophysicist?

I have been a geoscientist for the last 10 years. I graduated in 2013 with a MSc in Petroleum Geosciences in France and came to Australia to do my PhD. Since 2018, I am a Research Fellow specialising in Basin Analysis and Seismic Stratigraphy. Being in academia, what I enjoy the most is the opportunity to work on different scientific questions and explore what subsurface data have to offer. In Australia, most of the 3D seismic data is open file, which gives me the opportunity to work on different

basins, geological intervals, depositional settings... and simply have fun investigating and communicating about this research! Those data are also fantastic tools for learning, and I really enjoy teaching the students through the lens of 3D seismic because it gives a unique 3D perspective on depositional systems in the geological record.



4. What is a challenge you have overcome and how did you do so?

The biggest challenge was during COVID, when I had to teach online to students located in different countries. I am teaching Seismic Stratigraphy, and usually, I have students in a room and we interpret together seismic lines on paper. But during COVID, I had to fully change my approach and use other tools to be able to do this online. We used a series of online tutorials and videos, as well as extra sessions for them to ask questions. Students were great and understood the situation, everyone was in the same boat, so we all had to adapt!

5. What is your most memorable field trip experience? (e.g., best field meal? Your best sunrise/sunset location? Funniest or worst field memory?)

I have so many memories from the field work I conducted in Australia, hard

to choose! But the one that comes to mind is an “only in Australia” type of memory. I was doing some drone acquisition on an island located in the Exmouth Gulf. It was pretty hot that day and the sand was burning my feet. I decided to go knee-deep in the water with the remote controller, facing the beach and watching the drone flying. At some point, for whatever reason, I decide to turn around and I see, 5 meters away from me, the dorsal fin of a shark sneaking in behind me. I run out of the water and I shout at the skipper who stands on his boat and identifies the shark as a 2 meter long Hammerhead. This is when I realised I need to think a bit more of the local fauna on the field...



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6. Do you have any presentation tips? This may help our presenters at AEGC 2023.

Avoid too much text really on the slides. A good figure or image is worth a thousand words! On my slides, I am a big fan of having figures that can communicate a clear takeaway message and below, I often write one short sentence stating the big learning. It helps the audience to focus on what the speaker is saying instead of reading tons of text.

7. What is a challenge that you recognise the geoscience community faces today, and how do you see us overcoming it?

The biggest challenge in my view is: how do we clearly communicate the importance of geoscience to the wider community. The world is changing and everyone agrees we need to embrace the energy transition towards a more sustainable world. But this transition still needs resources and solutions that involve geoscientists. For instance, we cannot have electric cars or renewables energies without the mining industry. Yet, there are many people who don't understand why. To overcome this, we need to show to the wider community how these resources are part of our everyday life and in parallel, how we try to conduct activities less impactful on the environment. We can take the same example with the energy industry, where there is a significant effort to offset carbon emissions by developing new technologies for subsurface carbon storage. Being in the university sector, I can see this as a clear challenge because we need to show students that they can find jobs as geoscientists and that they will play a key role in the energy transition.

8. How can geoscience communities such as AIG, PESA, ASEG etc, better communicate how their fields can benefit the wider community?

Particularly with regards to the previous question, I think we need to have more outreach events open to the public, where these communities can convene a panel of experts on specific themes and there is a debate following questions. I think it would also be important to communicate about the role of geoscience directly in high schools.

9. Do you think AI will take over your job or will the human element remain vital to exploration successes?

Human will remain a vital element. My view is that semi-automated approaches and AI should be seen as tools to assist geoscientists in their interpretation and exploration workflows, but not as the endgame. For instance, for 3D seismic data interpretation, we have now access to tools allowing geoscientists to interpret semi-automatically entire volumes of data in a relatively short timeframe. But instead of thinking that the job is

done, it actually gives the geoscientist more time to think and analyse the results, which in the end leads to more robust models.