IET Travel Award for International Travel Report

Lisa Alazraki
Imperial College London

Conference: 37th Conference on Neural Information Processing Systems (NeurIPS 2023).

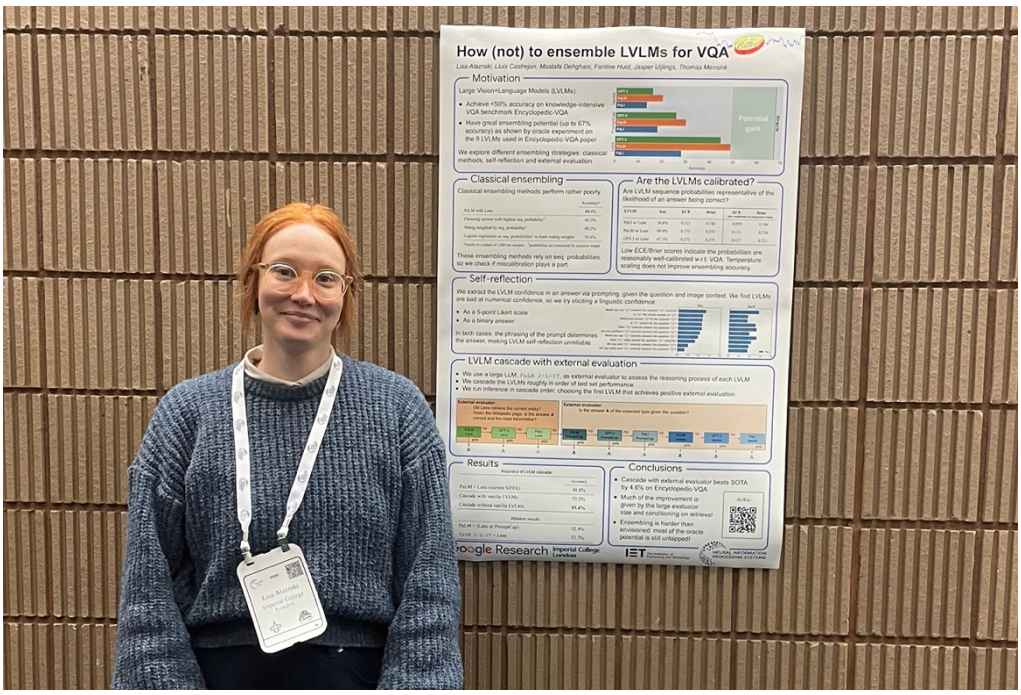
Thanks to the IET Travel Award I had the opportunity to fly to New Orleans, USA, to attend the 37th Conference on Neural Information Processing Systems (NeurIPS 2023) in December. There, I presented my latest research entitled “How (not) to ensemble LVLMs for VQA” at the I Can’t Believe It’s Not Better (ICBINB) workshop.

It was the first time for me attending NeurIPS – one of the most important computing conferences worldwide, focussing on artificial intelligence and machine learning. In fact, having begun my postgraduate studies during the COVID-19 pandemic, this was the first major conference I attended in person.

Entrance to the New Orleans Ernest N. Morial Convention Center, main venue of NeurIPS 2023.

The ICBINB workshop at NeurIPS stems from an initiative within the machine learning community to focus on ‘slow science’, promoting “meaningful research beyond bold numbers” and “shedding light on the research process”. The workshop was the ideal venue to present “How (not) to ensemble LVLMs for VQA” – a research endeavour that began in

summer 2023 while I was a Research Intern at Goole Research. The paper focusses on the knowledge-intensive VQA benchmark Encyclopedic-VQA. Using nine different LVLMs, it first shows the theoretic ensembling potential of these models via an oracle experiment, then proceeds to detail the shortcomings of both traditional ensembling methods and more recent 'self-reflection' and 'self-evaluation' techniques on the Encyclopedic-VQA task. The paper further shows that an LVLM cascade with external model evaluation achieves a satisfactory accuracy improvement, and carries out a thorough ablation study on this result.



Presenting the poster of "How (not) to ensemble LVLMs for VQA" at the ICBINB workshop @ NeurIPS 2023.

I had the opportunity to engage with many fellow researchers and engineers while at the workshop, presenting our poster and explaining in detail the experiments that led to "How (not) to ensemble LVLMs for VQA". I answered interesting and thought-provoking questions, many of which will inform my future research on this topic.

The ICBINB workshop was also a valuable opportunity to learn from the other works being showcased. I found of particular interest Anna Ivanova's presentation on "Dissociating language and thought in large language models", as well as Jie Ren et al.'s "Self-evaluation improves selective generation in large language models".

Finally, the conference provided the chance to network with other academics and professionals in the field of machine learning and artificial intelligence. In particular, I attended a stimulating and engaging lunch with other women in AI from all over the world, where we discussed our research and backgrounds and exchanged ideas.

Overall, as a PhD student at the beginning of my research career, visiting NeurIPS 2023 was an overwhelmingly positive experience. It provided me with novel ideas and research directions to explore over the next months, expanded my knowledge and grasp of the current research landscape in machine learning and AI, and widened my professional

network. Not to mention New Orleans is a truly stunning city and it was a great backdrop to the event!

New Orleans homes nearby the conference venue.

I am profoundly grateful to have been the recipient of an IET Travel Award, without which all this would not have been possible. The financial support that the Institution of Engineering & Technology offers early-career researchers like myself is invaluable.