

R-CCS Interns: Interview with Do Le Khanh Dang

RIKEN Center for Computational Science (R-CCS) accepts interns for the purpose of fostering the young researchers and engineers who will be the future leaders of HPC technologies and computational science. This time, we had the opportunity to interview one of our former interns.

Could you please introduce yourself, including your name, team, and job title?



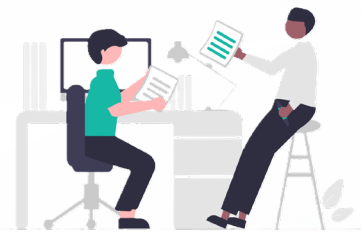
Hello, my name is Do Le Khanh Dang. I am a master's student at the University of Yamanashi under the MEXT scholarship program, and I was a member of the [Data Assimilation Research Team](#) during my internship at R-CCS, Kobe.

How did you spend your time in research during your internship?

I usually start my day at 9:00 AM, spending the morning reading research papers and checking results from overnight model training. In the afternoon, I worked on improving the models and started the next training session around 4:00 or 5:00 PM, so I'd have new results to review the next day. I also met regularly with my supervisor and team to talk about progress and challenges. I set aside time to learn new methods and tools for data assimilation and high-performance computing as well.

What motivated you to apply for the R-CCS international internship program?

I applied to the R-CCS International Internship Program because RIKEN is one of Japan's largest research institutes and home to the Fugaku supercomputer. I'm passionate about supercomputers and high-performance computing. I also wanted to learn from the Data Assimilation Research Team, which is a leader in their field. The international setting was a great opportunity to expand my network and experience Japanese research culture firsthand.



How do you feel about the atmosphere within the research team and working with your team leader and other young researchers?

I really enjoyed working with the Data Assimilation Research Team. The group was very collaborative and supportive, so I felt comfortable asking questions and sharing ideas. My supervisor was a great mentor, offering both guidance and the freedom to try my own ideas. Working with other researchers from different countries was also a highlight, as I learned about various research methods and gained a broader perspective on scientific collaboration. The team's assistants and the Internship Hosting Desk staff were always friendly and helpful, making it easier for me to settle in and focus on my research.



What was the most memorable experience during your internship?

The most memorable part of my internship was seeing the Fugaku supercomputer in person. I was amazed by its size and power. The room was huge, filled with rows of sleek racks, and the steady hum of the machines made it feel alive. Being there made high-performance computing feel real to me, not just something I'd read about. Standing next to one of the world's most powerful scientific tools was an honor and made me even more passionate about this research.

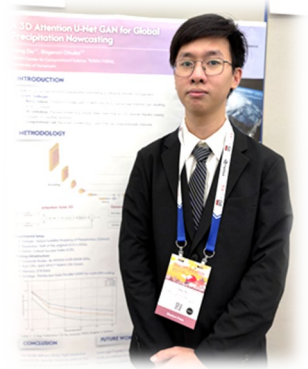


What challenges did you face in research during your internship, and how did you overcome them?

The most significant challenge I faced was handling the complex dynamics of the atmosphere and the chaotic nature of global rainfall patterns when using AI for prediction. My research at R-CCS focused on using AI to predict global rainfall maps. Because rainfall patterns evolve rapidly, the models sometimes struggled to accurately capture their motion, often producing blurry or smoothed forecasts rather than sharp, precise predictions. To address this, I took a multi-pronged approach. I refined the model architecture, testing loss functions and regularization techniques that penalize overly smoothed outputs, then I increased the resolution of the input data. This taught me a great deal about iterative problem-solving and the importance of domain expertise in developing deep learning models for scientific applications.

What are your plans, especially in terms of working with RIKEN?

I look forward to staying connected with my host team beyond the internship and engaging further with the RIKEN community through workshops and seminars. RIKEN's programs support young scientists at all career stages, including the Junior Research Associate and postdoctoral positions. I aspire to return someday to continue my research and make further contributions.



Do you have any advice for those who will be joining the R-CCS internship program?

While you focus on your research, don't forget to enjoy and explore Japan. The Kansai region has many interesting places to see, especially cities like Osaka, Kyoto, and Kobe. Each city has its own culture, history, and food, and visiting them will help you understand Japanese life outside the lab. Also, carefully consider the length of your internship. You will need to discuss the duration with your team, so make sure it's not too short to fully immerse yourself in the experience.



Do Le Khanh Dang, a master's student at the University of Yamanashi under the MEXT scholarship program, and a former intern in the 2025 R-CCS Internship Program. He additionally delivered a poster presentation at [SCA/HPCAsia 2026](#). Furthermore, he was selected to participate in the [ACM Second Asian School on High-Performance Computing and Artificial Intelligence](#), which he subsequently completed.