

NUS IT - AWS Cloud Credits for Research

Call for Proposals

(with special track: Applied Quantum in Research)

1. INFORMATION

NUS IT's Research Computing group provides the central high-performance computing resources and services to researchers through on-campus infrastructure or by partnering with commercial cloud service providers. One of our missions is to promote advanced computing technologies to accelerate researchers' works and gain a competitive edge in their research field.

This programme aims to provide free AWS cloud credits for eligible research projects within the NUS community. If approved, the cloud credits can be used by researchers to consume a wide range of AWS cloud resources and services (some limitations may apply). This programme is modelled after AWS' [global Cloud Credit for Research Programme](#) and is customised for NUS researchers.

2. SPECIAL TRACK: APPLIED QUANTUM IN RESEARCH

With the emergence of practical quantum technologies in the cloud, this programme provides a special track for research projects that would like to access quantum technologies available as part of AWS Braket offerings. Through this service, researchers can easily explore, experiment, or apply quantum annealing technology (D-Wave) and/or Gate-Model quantum processing unit technologies (IonQ, Rigetti) in their research work.

Projects submitted through this special track will have benefits of higher prioritization, special support from the Research Computing group and AWS, and higher award cap per project.

3. ELIGIBILITY

- This programme is open to all NUS researchers with AWS accounts that are registered using their NUS email address, subject to validation by the evaluation committee. If the researchers do not have an AWS accounts yet, the research computing group can provide help to create one after the award.
- This programme is open to all research staff and PhD students. PhD students need to provide support from their supervisors / PI.

- The Principal Investigator (PI) must have a full-time academic appointment at an NUS Faculty / School (Assistant Professor, Associate Professor or Professor) or Senior Research Fellow or above in Research Institutes / Centres.

4. CRITERIA FOR SELECTION AND AWARD

- Research work that are impactful to NUS and Singapore in general.
- Demonstrates novel use of cloud resources.

5. QUANTUM OF CREDITS AWARDED

- Each project will be awarded up to a maximum of USD10,000, or an amount deemed suitable by the evaluation committee
- For proposals requiring cloud credits of more than USD10,000, further evaluation will be done on a case-by-case basis
- (Special Track: Applied Quantum in Research) Each project will be awarded up to a maximum of USD20,000, or an amount deemed suitable by the evaluation committee.

6. PROCEDURE

A. Submitting a Proposal

Requestors shall make use of the online form in nTouch (under NUS Cloud Services – [Cloud Credits for Research](#)ⁱ).

- Prepare a proposal to be uploaded to nTouch, giving the followingⁱⁱ:
 - Description of the problem to be solved
 - Proposed AWS solution (including specific AWS tools, timeline, key milestones)
 - Plan for sharing outcomes (tools, data, and/or resources) created during the project
 - Any potential future use of AWS beyond supported project duration by individual research group or broader community
 - Any [AWS Public Datasets](#) to be used in your research
 - Keywords to facilitate proposal review
- Submit an estimate of the AWS resource usage via the [AWS Pricing Calculator](#) and submit the link to the online calculations.

B. Submission Timelines

- The Call for Proposal is open until 31 June 2022.
- Applicants may be invited for an interview with our evaluation committee to answer questions about their proposed projects.

- ii. Applicants will be informed of the decision of the evaluation committee, and if their proposals are accepted, the cloud credits will be disbursed to their AWS account.

C. Project Completion Report

Successful applicants will be required to submit a report upon completion of their project, and to acknowledge the cloud credits for research programme in their publications.

For any clarifications on the above, please email: nusit-hpc@nus.edu.sg

ⁱ On desktop browsers, click on: <https://tinyurl.com/2pcyka4a>

ⁱⁱ See: <https://aws.amazon.com/government-education/research-and-technical-computing/cloud-credit-for-research/faqs/proposal-preparation/>