Chula Pioneers Responsible Use of Generative AI for Higher Education in Thailand with the Inauguration of 'ChulaGENIE,' in Collaboration with Google Cloud

ChulaGENIE, a multilingual, multimodal generative AI application built using Google Cloud's Vertex AI platform, is tailored to meet the research and learning needs of Chula's diverse community

Responsible AI tools on Vertex AI enable ChulaGENIE to deliver safe, private, and secure AI experiences to more than 50,000 staff, faculty members, and students

Chula provides its community with no-cost access to the Google AI Essentials course, has further plans to collaborate with Google Cloud on a Thai large language model for higher education

Bangkok, Thailand, Nov. 28, 2024 – Chulalongkorn University (Chula), Thailand's pre-eminent higher education institution, and Google Cloud today announced the inauguration of ChulaGENIE, a continuous application delivery project that makes the world's most advanced generative AI (gen AI) capabilities safely, securely, and freely available to Chula's entire community. ChulaGENIE will be initially available to Chula staff and faculty members in January 2025, with all students receiving access in March 2025. ChulaGENIE stands for 'Chula's Generative AI Environment for Nurturing Intelligence and Education.'

Through its integration with <u>Model Garden on Vertex AI</u>, ChulaGENIE lets users discover and choose from a curated set of AI foundation models. These models have varying strengths and are suitable for different tasks. Initially, users can use Google's Gemini 1.5 Flash or Gemini 1.5 Pro. They will soon also have the option of using enterprise-grade versions of <u>Anthropic's Claude models</u> and <u>Meta's Llama models</u>.

ChulaGENIE users can tap Gemini models' <u>multilinguality</u> to get easy-to-understand explanations of intricate topics or generate content in Thai, English, and other languages with speed and precision. With these models' <u>multimodality</u> and <u>long context</u> <u>window</u>, users can upload lengthy and complex documents (e.g., 1.4 million words with tables, charts, and images), including PDFs. Gemini models can process the text and visual elements within these documents to help users extract specific information or insights. This is especially useful for researchers who need to summarize academic literature or analyze datasets.

Professor Dr. Wilert Puriwat, President, Chulalongkorn University, said: "For Chula to realize its vision of becoming Thailand's premier Al university, we needed best-in-class capabilities to accelerate the development of trusted and sovereign Al that benefits society. Google Cloud's Vertex Al provides all the capabilities we are looking for within a single platform. It offers rigorous safety, privacy, and security safeguards; flexibility of choice through Model Garden; and the ability to customize powerful foundation models for diverse needs and more accurate responses. This allowed us to build and unveil ChulaGENIE in under three months, making Chula the first university in Thailand to offer a gen Al application for higher education that is customizable by users, adheres to responsible Al principles, and serves the community at scale. In collaboration with Google Cloud, we plan to continuously enhance ChulaGENIE while enabling more homegrown, education-centric Al innovations to achieve maturity and adoption momentum."

Empowering the Chula community with customizable and responsible Al

Chula will soon introduce a new functionality within ChulaGENIE: members of the Chula community will be able to create custom AI agents specializing in a particular area to assist themselves, or others, with specific tasks. Potential examples of customized AI agents include:

- Research assistants that are fine-tuned on a niche area, such as the effectiveness of different carbon sequestration
 techniques in environmental science, or the optimization of urban traffic flow in civil engineering. Faculty members and
 students can then identify connections and contradictions across research papers, and propose novel research questions
 or hypotheses.
- Academic advisors that are trained on a knowledge base of academic and career information, student support

resources, educational best practices, and ethical considerations. This allows students to obtain tailored advice on course selection and career paths.

• Administrative assistants that can comprehend and respond to queries in areas like admissions, enrollment, financial aid, facilities management, or IT support.

Responsible use of AI is top priority for Chula. The university has therefore employed Vertex AI'ssafety filters and its own governance framework to prevent ChulaGENIE from generating harmful or inappropriate content. To further enhance the accuracy of responses generated by ChulaGENIE, Chula will enable <u>Grounding with Google Search</u>, a unique feature provided by Google Cloud.

Importantly, Chula utilizes Google Cloud's enterprise-grade data encryption and access controls to deliver private and secure Al experiences. This ensures that users' input prompts and the Al's responses are not used to train underlying foundation models, preserving user privacy while allowing Chula to analyze ChulaGENIE's broader usage trends to inform application improvements. This also prevents ChulaGENIE from unintentionally leaking confidential research or other sensitive intellectual property.

Moving forward, Chula plans to expand its collaboration with Google Cloud to develop an open-sourced, domain-specific Thai large language model for higher education. This model could be used to drive applications that adapt to individual students' learning pace and style, providing customized exercises, explanations, and feedback. It could also underpin applications that analyze existing curricula for gaps or areas for improvement, suggesting modifications based on the latest research and educational trends.

Equipping the Chula community with essential AI skills

Chula has been offering the <u>Google AI Essentials</u> course to its staff, faculty members, and students, at no cost, under Google's <u>Samart Skills</u> program. To date, more than 800 individuals at Chula have completed this course, earning a certificate from Google to validate their competency in using gen AI tools. Through expert-led videos, hands-on practice, and other relevant assessments and resources, Google AI Essentials helps learners master the art of prompting and understand how to use AI responsibly.

The university is concurrently adapting the Google AI Essentials curriculum into a simplified course for non-native English speakers. This ensures that all Chula community members can learn to effectively use ChulaGENIE to boost productivity, solve real-world problems, and advance innovation in their fields.

Annop Siritikul, Country Director, Thailand, Google Cloud, said: "At Google Cloud, we believe that AI's usefulness hinges on its precision and responsible implementation. Our Vertex AI platform empowers organizations like Chula to operationalize responsible AI through features like grounding, model evaluation services, and tools for meeting stringent standards around data governance, privacy, and intellectual property protection. Chula's rapid rollout of ChulaGENIE reinforces the value of a platform-first approach for strategic AI initiatives, enabling development, deployment, and management at scale. This, along with a new Thai large language model for higher education and Google's AI skilling programs, will unlock new possibilities in research and academia, ultimately benefiting all of Thai society."

About Chulalongkorn University

Chulalongkorn University, Thailand's first and top-ranked institution, excels in academia and AI innovation. Ranked 211th globally in the QS World Rankings 2024, it has led Thailand for 15 years. Known for producing highly employable graduates, it ranks among the top 50 globally in employment outcomes. Its internationally accredited programs, including AACSB and EQUIS for business, meet global standards. Chulalongkorn continues to shape leaders and advance academic excellence worldwide.

About Google Cloud

Google Cloud is the new way to the cloud, providing AI, infrastructure, developer, data, security, and collaboration tools built for today and tomorrow. Google Cloud offers a powerful, fully integrated and optimized AI stack with its own planet-scale infrastructure, custom-built chips, generative AI models and development platform, as well as AI-powered applications, to help organizations transform. Customers in more than 200 countries and territories turn to Google Cloud as their trusted technology partner.

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