

NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)



Senate
Office of the Secretary

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SENATE

Proposed Senate Resolution No. 377

RECEIVED BY

Introduced by Senator AQUILINO "KOKO" PIMENTEL III

RESOLUTION

CONGRATULATING AND COMMENDING BATANGAS STATE UNIVERSITY FOR WINNING THE CHAMPIONSHIP IN THE UNIVERSITY CATEGORY AS WELL AS FOR THEIR EXEMPLARY PERFORMANCE IN THE RECENTLY CONCLUDED ENGINEERING INNOVATION CHALLENGE (EIC) 2022 HELD LAST NOVEMBER IN SINGAPORE

WHEREAS, Batangas State University was recently declared as the Philippines' National Engineering University by virtue of Republic Act No. 11694 enacted on 11 April 2022;

WHEREAS, on 19 November 2022, at the celebration of Singapore's National Engineering Day, a team of B.S. Electronics Engineering students from Batangas State University ("BatSU") emerged victorious as "CHAMPION" in the University Category of the recently concluded Engineering Innovation Challenge (EIC) 2022;

WHEREAS, EIC, a prestigious contest organized by the Institution of Engineers, Singapore and Science Centre Singapore, and supported by the Singapore Ministry of Education concluded during the celebration of Singapore's National Engineering Day;

WHEREAS, the team, composed of students Marc James M. Beltran, John Vincent D. Biscocho, Lawrence M. De Castro, Maria

Nelly S. Magboo, and Jerico D. Matibag, together with their mentor Dr. Alvin S. Alon, Head of BatSU's Digital Transformation Center, bested students from other countries including those from the National University of Singapore and the National Technological University, which ranked second and third, respectively;

WHEREAS, despite limited time and resources of one (1) month to code and develop the prototype, and prepare the video and paper for the project, the team managed to develop "AI-quaponics-360," a machine capable of monitoring and controlling the zoological and botanical components of a small-scale aquaponics system, using Artificial Intelligence (AI) technology;

WHEREAS, aquaponics is a method of growing plants in water used for breeding other aquatic organisms, and serves as the ecosystem for both plants and fish, utilizing fish manure to be chemically converted into cultured water which is healthy for the plants;

WHEREAS, their achievement also opened doors to create more innovative and sustainable technologies that would be beneficial to the country, particularly in the effort to address food sustainability and security through home urban farming;

WHEREAS, two (2) other BatSU teams managed to clinch the top ten (10) spots and won "Merit Awards" under the same category, in particular: the entry "Intelligence Road Quality Monitoring System with Vibration Sensing Device and Machine Vision Camera," dubbed as "AI-rover," developed by John Lloyd A. Austria, Alyssa Mharbie T. Aleta, Nicole L. Librea, James D. Mondelo, and John Carlo L. Padua, together with their mentor, Dr. Anton Louise P. De Ocampo ("Dr. De Ocampo"), Head of the Electronics Systems Research Center; as well as the entry "AI-optimized 3D-Printed Adsorbents Decorated with Waste PET Plastic-Derived Metal-Organic Frameworks for Effective and Sustainable Wastewater Remediation," dubbed as "AI 3D SET GO," developed by Lawrence V. Portillo, Alvin D. Javier, Andrea A. Rubia, and Abigayle Vince G. Cruz, together with their coach, Dr. Reymark D. Maalihan;

WHEREAS, another team from BatSU also made it to the competition, in particular, the entry "Urban Building Placements and Generating Environmental Impacts Through Artificial Intelligence," dubbed as "EUGTO," developed by Rosselle June M. Asi, Eloiza Jean D. Atienza, Clarisse F. Fajarito, Christine Marie V. Oca, and Abegail B. Pangilinan, also under the guidance of Dr. Anton Louise P. De Ocampo as their mentor;

WHEREAS, these achievements bring great pride and joy to our country by prominently raising the Philippine flag in the realm of science, technology, and innovation, and by highlighting the capabilities of Filipinos globally and internationally as among the world's best;

WHEREAS, BatSU truly affirmed itself as the National Engineering University, and lives up to its motto of "Leading Innovations, Transforming Lives, and Building the Nation";

NOW THEREFORE, be it **RESOLVED** by the Senate of the Philippines, as it is hereby **RESOLVED**, to congratulate and commend Batangas State University for winning the championship in the University Category as well as for their exemplary performance in the recently concluded Engineering Innovation Challenge 2022 held in Singapore.

Adopted,


AQUILINO "KOKO" PIMENTEL III