

Jose Rizal University College of Computer Studies Engineering Computer Engineering Department

W4 - Webinar Report

CPE C409 – SEMINARS AND FIELDTRIPS

Submitted by:

Exiquiel John A. Pines

Submitted to:

Mrs. Monette Loy-A

Date Submitted:

September 23, 2023

Hosting Institution: 2023 ICpEP 3rd International Convention and ICpEP 11th National

Convention

Seminar Title: Industries 4.0 as applied to Rail Transport Engineering

Speaker: Marlou Jasmin Madrio

Seminar Date and Time: September 14, 2023 / 1:45 PM

Seminar Venue: Webinar via Zoom

On September 14, 2023, I attended the 2023 ICpEP 3rd International Convention and ICpEP 11th National Convention, one of the topics was titled "Industries 4.0 as Applied to Rail Transport Engineering." The topic was presented by Marlou Jasmin Madrio, a Systems and Controls Engineer for SMRT Corporation in Singapore.

In his seminar, Mr. Madrio discussed a number of ways that Industry 4.0 technologies are being applied to rail transport engineering. Industry 4.0 is the fourth industrial revolution, and it is characterized by the integration of digital technologies into manufacturing and production processes. Industry 4.0 technologies are transforming many industries, including rail transport engineering. One example is the use of sensors to collect data on the condition of rail tracks, trains, and other infrastructure. This data can then be used to predict when maintenance is needed, preventing costly and disruptive failures.

The Industrial Internet of Things (IIoT) is a network of physical objects that are embedded with sensors, software, and other technologies to connect and exchange data with other devices and systems. IIoT is being used in a wide range of industries, including rail transport engineering. IIoT technologies can be used to collect data on all aspects of rail transport operations which can then be used to improve train safety, efficiency, and reliability. IIoT has the potential to revolutionize the rail transport industry, making it safer, more efficient, and more reliable. IIoT is also likely to lead to the development of new and innovative rail transport services.

WAGO's one source of truth concept is a central repository for all data related to a product or process. This repository is synchronized with all systems and applications that use the data, ensuring that everyone is working with the same up-to-date information. WAGO's one source of truth concept helps businesses to ensure that they are working with accurate and up-to-date data at

all times. This is essential for making informed decisions, improving efficiency, and reducing costs. Through this, it can help to improve the safety and efficiency, as well as reduce costs of rail transportation.



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W4 - Webinar Evaluation

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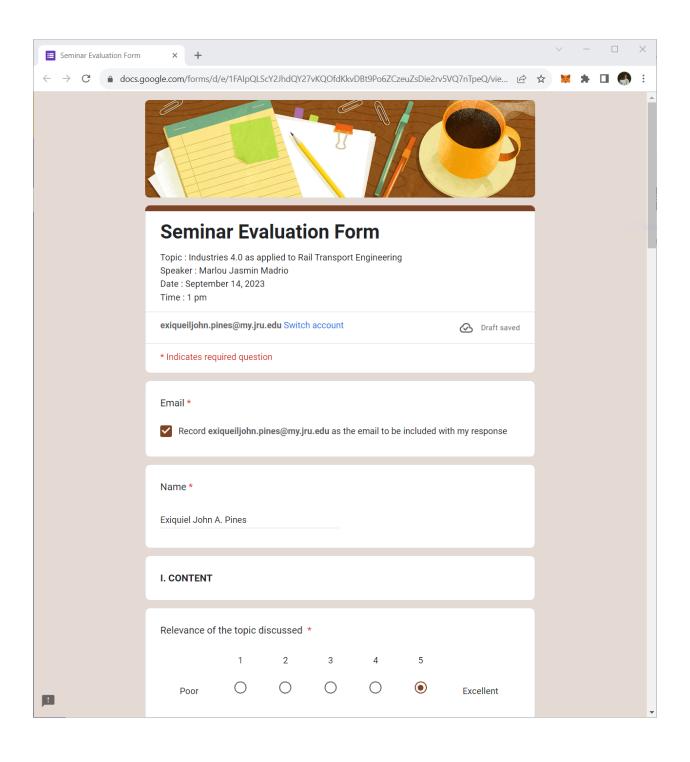
Exiquiel John A. Pines

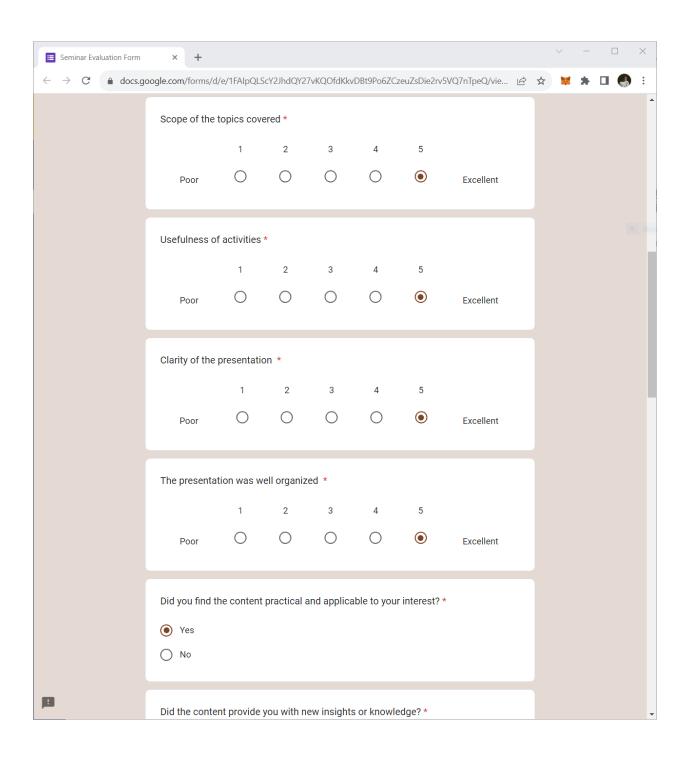
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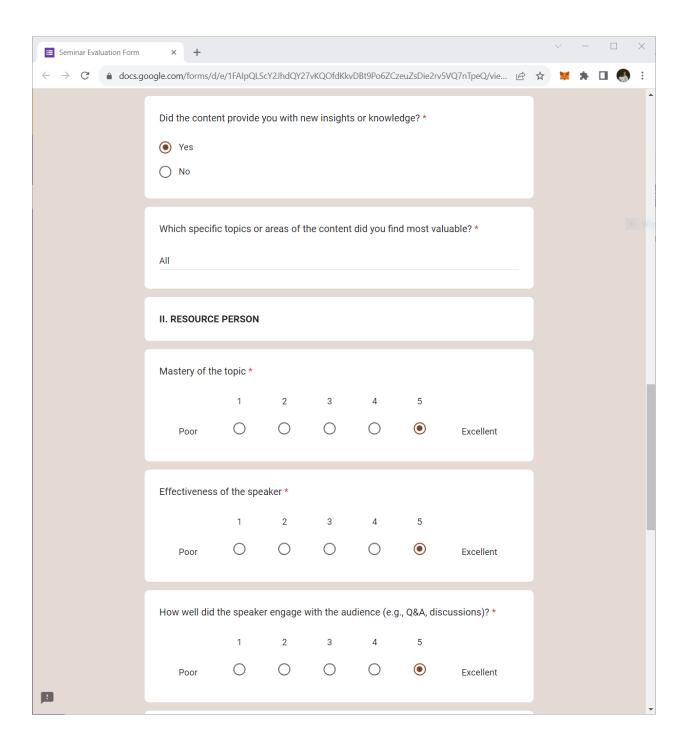
Mrs. Monette Loy-A

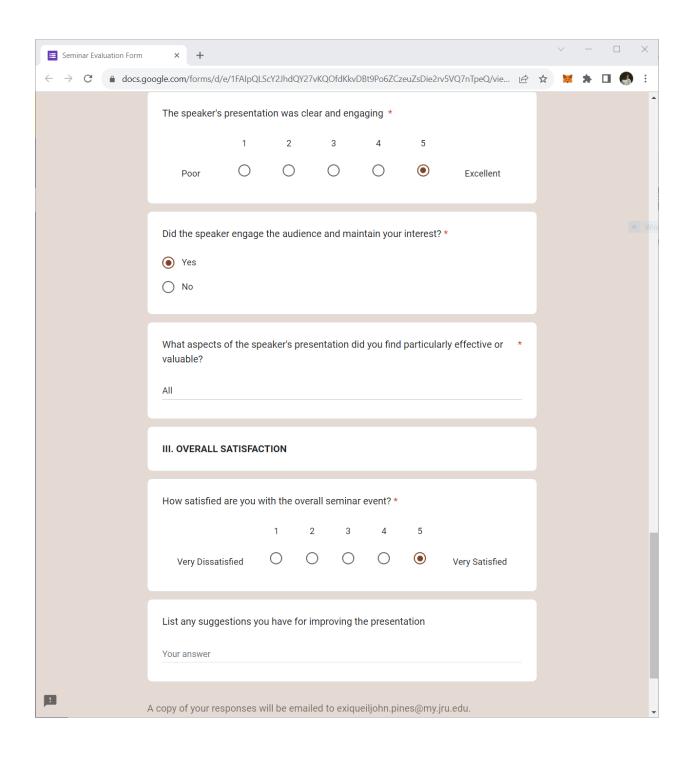
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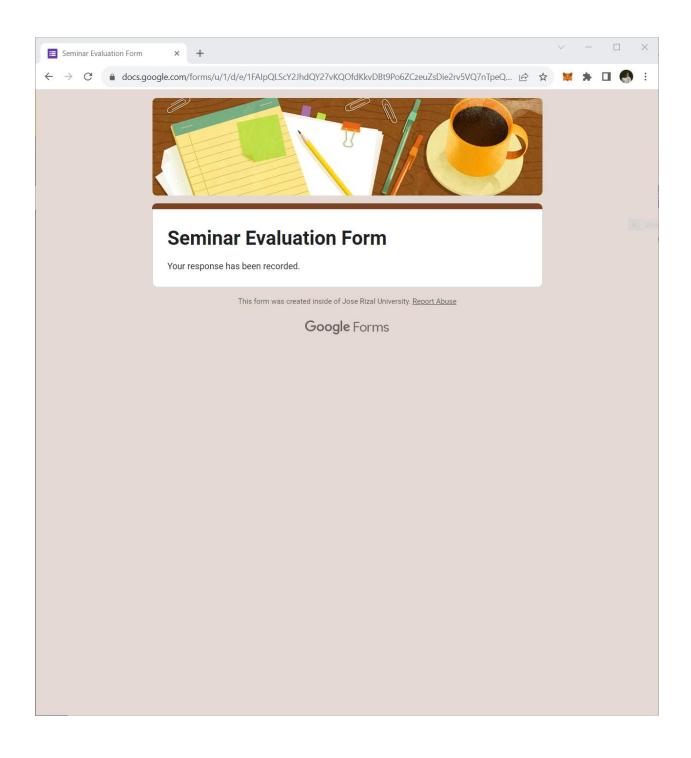
September 23, 2023















INSTITUTE OF COMPUTER ENGINEERS OF THE PHILIPPINES

presents this

Certificate of Participation

to

EXIQUIEL JOHN A. PINES

for his/her active and invaluable participation on
Topic: Industries 4.0 as applied to Rail Transport Engineering
during the conduct of 3rd International Convention and 11th National Convention of the
Institute of Computer Engineers of the Philippines,
held from the 14th to the 15th of September 2023 at The Farm @ Carpenter Hill
Koronadal City, South Cotabato, Philippines, with the theme
"Engineering Digital Transformation for Smart and Sustainable Communities."

Given this 15th day of September 2023 at The Farm @ Carpenter Hill Koronadal City, South Cotabato, Philippines.

ENGR. PERCILA M. PANAGDATO, PCpE

Overall Chairman, ICpEP IntNatCon 2023 President, ICpEP-R12



DR. ROBEN A. JUANATAS, PCpE

National President, ICpEP