



**SILVER OAK
UNIVERSITY**
EDUCATION TO INNOVATION



IEEE

**Silver Oak University
IEEE Student Branch**



A REPORT ON MIMO Communication in 5G and Beyond

Date: 16th April, 2021

Place: Cisco WebEx Meeting

**IEEE Signal Processing Society Gujarat Chapter
in collaboration with
IEEE SPS, SCET SBC and IEEE SPS, SOU SBC
presents
Expert Talk Series**

Multiple-input/multiple-out (MIMO) technology plays a prominent role in Wi-Fi communications, as well as 3G, 4G, and 5G networks.

MIMO Communication in 5G and Beyond

April 16, 2021 | 2 PM IST

Introduction

Acceding to the mission and vision of IEEE Signal Processing Society, IEEE SPS Silver Oak University Student Branch Chapter aimed to provide the best possible technical upliftment and to keep the members acquainted with the latest information. With the same motto, we had the first-ever event of our Student Branch Chapter which was an expert talk on “MIMO Communication in 5G and Beyond” collectively organized by IEEE SPS Gujarat Chapter in collaboration with IEEE SPS Silver Oak University SBC and IEEE SPS Sarvajanik College of Engineering & Technology SBC under the Technical Talk Series 2021.

About the Speaker

The talk was held by a very prominent speaker Dr. Emil Bjornson, Professor, KTH Royal Institute of Technology, Sweden. He has performed MIMO research for over ten years, his papers have received more than 10000 citations. He has received the 2019 IEEE Signal Processing Magazine Best Column Award. He has authored the textbooks Optimal Resource Allocation in Coordinated Multi-Cell Systems (2013) and Massive MIMO Networks: Spectral, Energy, and Hardware Efficiency.

About the Session

Date: 16th April, 2021

Time: 02:00 PM to 03:30 PM IST

Platform: Cisco WebEx Meeting

Participants: 70+

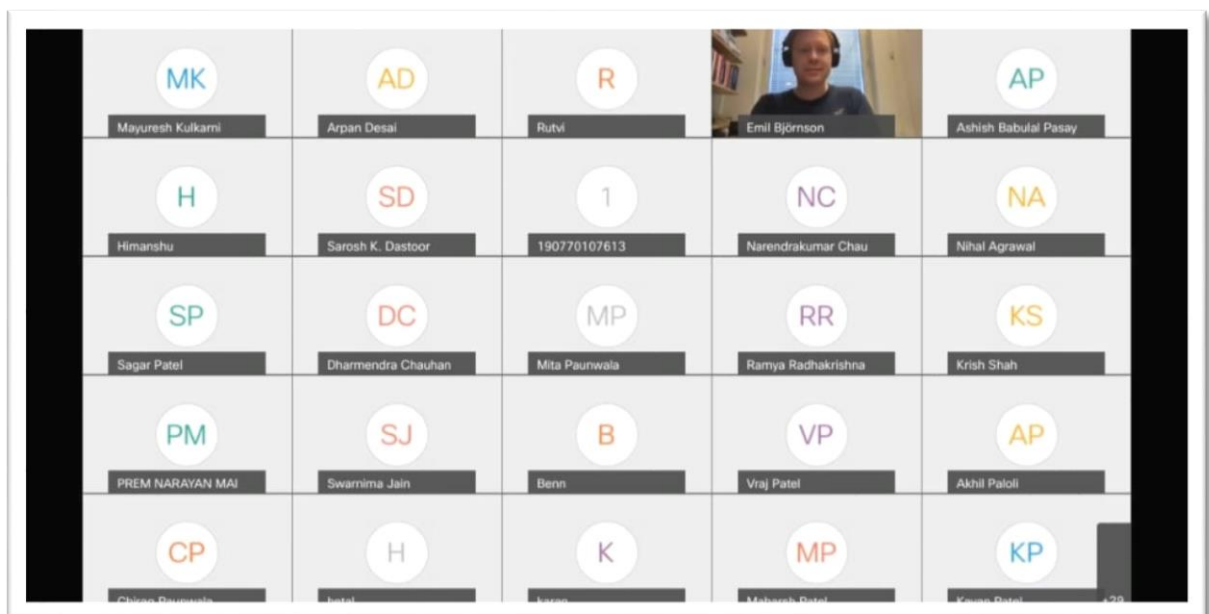
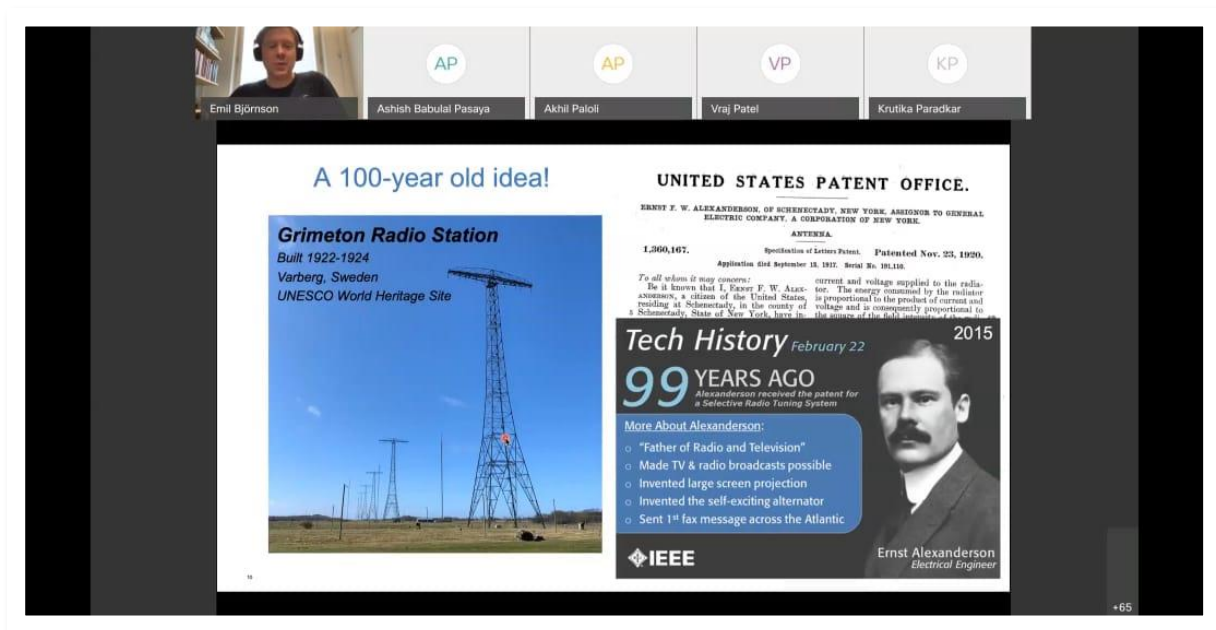
The session commenced at 02:00 P.M. with the welcome speech and the introduction of the speaker. After that the session was handed over to the talented expert Dr. Emil Bjornson. The respected speaker Dr. Emil Bjornson started the session by talking about the traffic growth in cellular networks and explained the traditional measures used for improving network capacity. Further, he explained the applications of 6G spectrum and a generalization about MIMO communication with the benefits of Massive MIMO and its evolution beyond 5G cellular. He suggested everyone to focus on evolving technology rather than applications. He also addressed that there is no immediate success in cellular networks.

Dr. Emil Bjornson ended the session on the note that Massive MIMO is just the beginning with further evolution its significance is very broad.

Conclusion

The event was concluded with an interactive session of questions and answers and by offering profound thanks to our prominent speaker Dr. Emil Björnson, enthusiastic participants, and coordinators by Prof. Mayuresh Kulkarni. Also a token of gratitude and appreciation was being felicitated to the speaker by IEEE SPS Gujarat Chapter under Technical Talk Series 2021. As this event has achieved magnificent views and positive responses, we are looking forward to organizing such more beneficial events in the near future.

Some glimpse of the event



Mayuresh Kulkarni (MK) Rutvi (R) Emil Björnson (E) Arpan Desai (AD) Madhavi Belsare (MB)

IEEE SPS, Gujarat Chapter
Technical Talk Series 2021

IEEE SPS GS, IEEE SPS SOU SBC and IEEE SPS SCET SBC thanks
Dr Emil Björnson
for delivering an expert talk on
"MIMO Communication in 5G and Beyond"

16/04/2021

+48

