



CELTIC-NEXT Proposers Day



7th of September 2022, Online via WebEx

Artificial Intelligence/Machine Learning Empowered
Optical Network

AI-ON



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Teaser



What is the main benefit of the idea/proposal?

- Optimizing the performance and efficiency of optical networks with flexibility and reliability, through prediction, management and maintenance, using artificial intelligence and machine learning (AI and ML)

What makes the added value?

- AI/ML could provide an important tool for optimizing the performance of dynamic optical network, by enabling optimized resource allocation, reducing system margin, predicting traffic patterns, predicting and localizing potential hard/soft failures, cross-layer optimization, OSNR monitoring, etc.

Why should I participate in the project?

- AI/ML global market is projected to grow from \$17.9B in 2022 to \$54.7B in 2027
- Increasing demand of AI/ML in Telecom industry
- Dynamic change in global network traffic - Optimization and monitoring using AI/ML
- Increasing demand for flexible and intelligent optical network



Organisation Profile



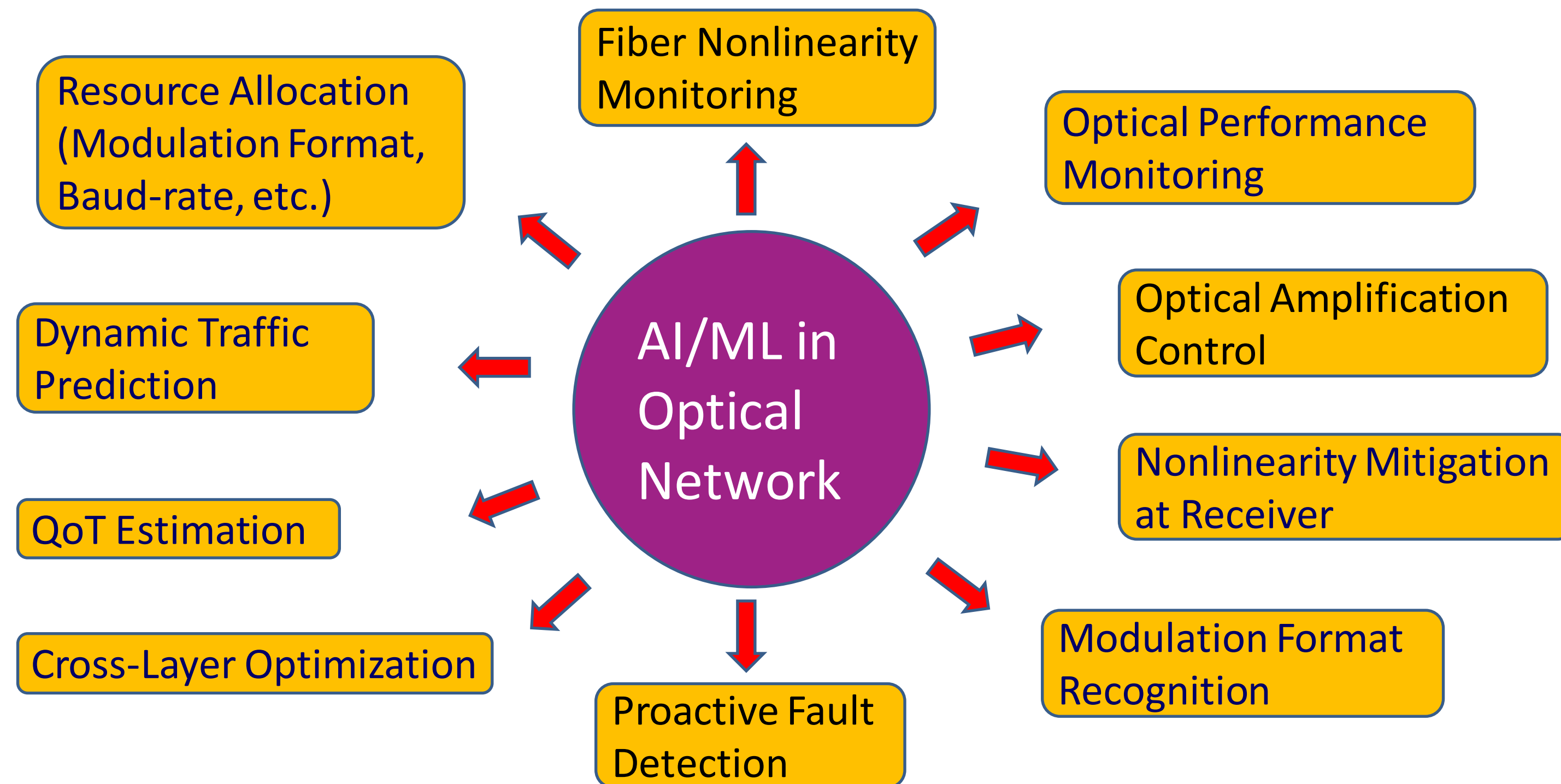
- **ECI Telecom (now Ribbon Communications** (Nasdaq: RBBN) IP-Optical division) delivers IP and optical networking solutions and communications software to service providers and critical infrastructure sectors, globally
- ECI's end-to-end solutions portfolio delivers unparalleled scale, performance, and agility, with cloud-native offers and analytics tools, as part of the IP and Optical networking solutions for 5G
- With over 60 years of Telecom experience, ECI Telecom Packet-Optical solutions are provided to over 250 leading customers worldwide



Proposal Introduction

What the idea/proposal is about (vision, motivation, content)

- Research and implementation of AI/ML in Dynamic Optical Network in related use cases
- To create and support intelligent and automated network under dynamic traffic conditions via Network Management, Resource Provisioning, Monitoring, and Prediction
- Continuous monitoring of dynamic optical network with AI/ML



Proposal Introduction



Expected outcome

- Automated network for optimized performance with intelligent management and monitoring using AI/ML

Impact

- Impacting the optical communication and network industry with optimal performance with reduced system margin, resource allocation, monitoring, and prediction

Schedule

- 36 months, starting 4/2023



Partners



Partners we are looking for

- Telecom partners that will provide data set for AI/ML
- Artificial Intelligence and Machine Learning developers
- Network Management partners
- Customers Service Providers and Network Operators
- University partner for R&D activities



Contact Info



For more information and for interest to participate please contact:

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Presentation available via:



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