

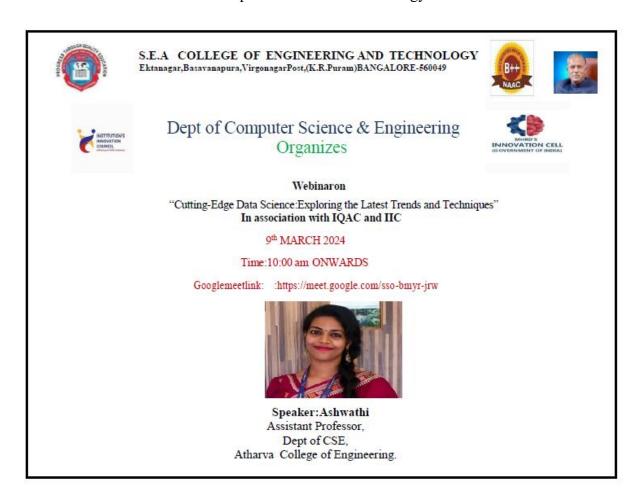




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### REPORT ON WEBINAR "CUTTING EDGE DATA SCIENCE :EXPLORING LATEST TRENDS AND TECHNOLOGY – 2023"

A webinar on "Cutting Edge Data Science: Exploring latest trends and Technology" was conducted on 9<sup>th</sup> March 2024. The objective of conducting the Webinar was to knowledge the students on how Data Science is important in current technology.



The webinar was conducted successfully with whole hearted participation by Ashwathi, Assistant Professor, Atharva College of Engineering, Dr. Bhagavant K Deshpande (Director Engg, SEA College of Engineering & Tech), Dr.B Venkata Narayana (Principal, SEA College of Engineering & Tech) along with other staffs and students of the SEA College of Engineering & Technology.

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#### **OBJECTIVES OF THE PROGRAM**

#### Data Science Includes all the following concepts

- 1. **Machine Learning Operations** (**MLOps**): As organizations increasingly rely on machine learning models in production, MLOps has emerged to streamline the deployment, monitoring, and management of these models at scale. Automation, version control, and collaboration tools play pivotal roles in MLOps.
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- 4. **Explainable AI (XAI)**: The black-box nature of many machine learning models raises concerns about transparency and accountability. XAI techniques aim to enhance model interpretability, enabling stakeholders to understand why a model makes specific predictions or decisions.
- 5. **AutoML and Hyperautomation**: AutoML platforms empower users with minimal machine learning expertise to automate the end-to-end process of model development, from data preprocessing to model selection and deployment. Hyperautomation extends this concept by integrating AI and machine learning with robotic process automation (RPA) to automate entire business processes.
- 6. **Graph Neural Networks** (**GNNs**): GNNs have gained attention for their effectiveness in modeling and analyzing structured data, such as social networks, biological networks, and

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- knowledge graphs. They excel in tasks like node classification, link prediction, and graph generation.
- 7. **Time Series Forecasting with Deep Learning**: Deep learning techniques, including recurrent neural networks (RNNs) and transformers, have shown promise in time series forecasting tasks. They can capture complex temporal dependencies and patterns in data, outperforming traditional methods in various domains like finance, energy, and healthcare.
- 8. **AI Ethics and Responsible AI**: With AI's increasing influence on society, ethical considerations have become paramount. Researchers and practitioners are actively exploring frameworks and guidelines for developing AI systems that prioritize fairness, transparency, accountability, and inclusivity.
- 9. Quantum Machine Learning: While still in its nascent stages, quantum machine learning harnesses the principles of quantum mechanics to perform computations exponentially faster than classical computers. Quantum algorithms promise breakthroughs in areas like optimization, cryptography, and pattern recognition.
- 10. **Natural Language Processing (NLP) Advancements**: Recent advancements in NLP, particularly with transformer-based models like GPT (Generative Pre-trained Transformer) series, have pushed the boundaries of language understanding and generation. Applications range from language translation and sentiment analysis to text summarization and conversational AI.
- 11. **Edge AI**: As the Internet of Things (IoT) continues to proliferate, there's a growing need for AI models to run efficiently on edge devices with limited computational resources. Edge AI brings intelligence closer to the data source, enabling real-time inference and reducing latency.







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### **OUTCOMES OF THE PROGRAM**

- 1. Increased knowledge and understanding: Participants may gain new insights, learn new techniques or tools, and deepen their understanding of various aspects of data science.
- 2. Skill development: Webinars often include practical examples, case studies, or hands-on exercises that can help participants improve their data analysis, programming, or machine learning skills.
- 3. Inspiration and motivation: Engaging webinars can inspire participants to explore new ideas, pursue further education or certifications, or apply data science concepts in their work or research.
- 4. Awareness of industry trends and best practices: Webinars may cover emerging trends, advancements, and best practices in the field of data science, helping participants stay updated and competitive in their careers.
- 5. Feedback and discussion: Q&A sessions or interactive elements in webinars allow participants to ask questions, share their experiences, and engage in discussions with presenters and fellow attendees.

Overall, the outcome of a data science webinar is often a combination of increased knowledge, skills, connections, and motivation for participants to continue learning and applying data science principles in their work or studies.







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### **GLIMPSES**



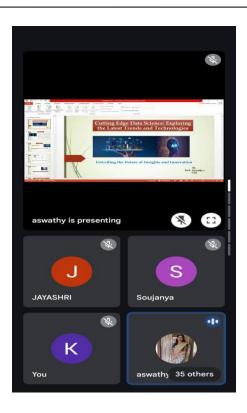




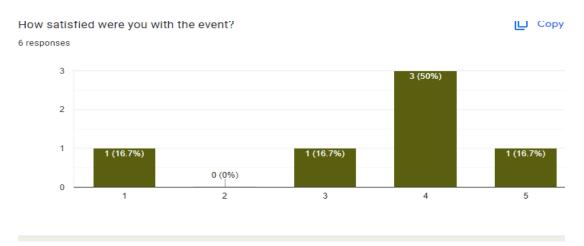




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#### FEEDBACK RESPONSES:

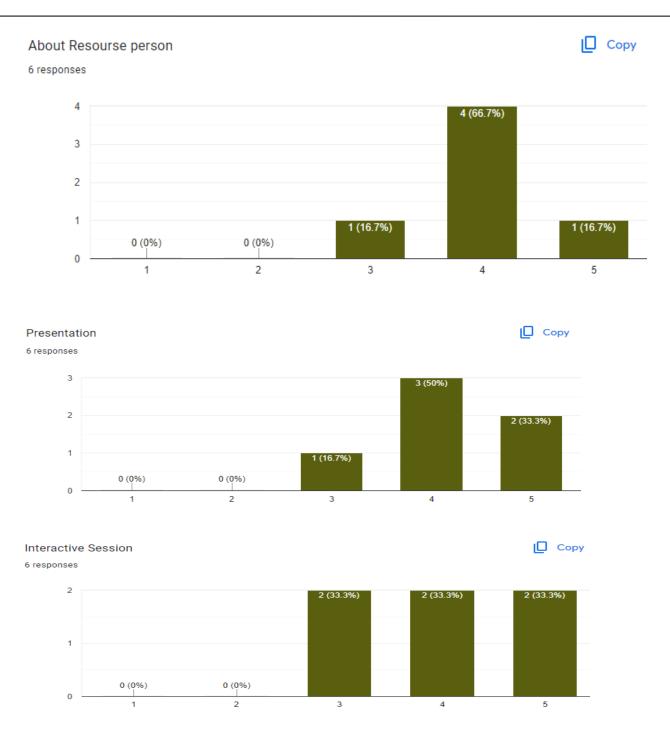








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Any overall feedback for the event? 

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6 responses

