Analyzing Video Data in Research Training Course

Professional Development Training Course Outline

Category	Research and Data Analysis	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Video data has rapidly emerged as a transformative tool in research, enabling deeper insights into human behavior, interactions, and real-world phenomena. With the rise of AI-powered analytics, machine learning, and computer vision, researchers now have the capability to extract rich, quantifiable information from video content, accelerating evidence-based decision-making. Analyzing Video Data in Research Training Course empowers participants to master the latest video analytics techniques, integrating qualitative and quantitative research approaches to deliver actionable insights.

In today's data-driven world, the ability to analyze video data is no longer optional it is essential for cutting-edge research across social sciences, healthcare, marketing, sports, and education. Participants will gain hands-on expertise in video annotation, automated coding, behavioral analysis, and predictive modeling. By combining state-of-the-art software tools with real-world case studies, this course equips researchers with practical skills to transform raw video footage into meaningful, high-impact research findings.

Programme Curriculum

Analyzing Video Data in Research Training Course

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Course Objectives

1. Understand video data analytics trends and emerging technologies in research.
2. Develop skills in video coding and annotation techniques.
3. Apply computer vision algorithms for automated behavior detection.
4. Learn AI-driven video analytics for predictive insights.
5. Master multi-modal video data integration with qualitative and quantitative research.
6. Gain expertise in behavioral observation and interaction analysis.
7. Conduct real-time video data monitoring for research purposes.
8. Utilize video data management and metadata tagging best practices.
9. Enhance data visualization and reporting using video analytics tools.
10. Apply ethical guidelines and compliance in video research.
11. Leverage machine learning models for pattern recognition in videos.
12. Conduct comparative analysis and longitudinal studies using video data.
13. Develop actionable insights using case study-driven video research methods.

Target Audience

1. Academic researchers and faculty
2. Social scientists and behavioral researchers
3. Market research analysts
4. Healthcare and medical researchers
5. Sports performance analysts
6. Educational researchers and instructional designers
7. Data scientists and AI practitioners
8. Policy analysts and human-computer interaction specialists

Course Modules

Module 1: Introduction to Video Data in Research

- Overview of video data types and formats
- Role of video analytics in modern research
- Trends in AI-driven video research
- Benefits of video data over traditional methods
- Case study: Using video to analyze classroom interactions

Module 2: Video Data Collection & Management

- Techniques for video capture and storage
- Metadata tagging and cataloging
- Video data security and ethical compliance

- File formats, compression, and data integrity
- Case study: Managing large-scale video datasets in social research

Module 3: Video Coding and Annotation Techniques

- Manual vs. automated annotation methods
- Time-stamped behavior tagging
- Coding frameworks for qualitative research
- Tools for collaborative annotation
- Case study: Coding non-verbal communication in therapy sessions

Module 4: Computer Vision & AI in Video Analytics

- Basics of computer vision for research
- Object detection and tracking
- Pose estimation and facial expression recognition
- AI-assisted pattern recognition in videos
- Case study: Detecting crowd behavior in urban studies

Module 5: Behavioral Analysis from Video

- Observational methods for human behavior
- Quantitative metrics extraction
- Interaction and engagement analysis
- Multi-camera and multi-angle analysis
- Case study: Video-based behavioral assessment in healthcare

Module 6: Multi-modal Integration & Data Fusion

- Combining video with sensor and text data
- Audio-visual synchronization techniques
- Enhancing research accuracy with multi-modal inputs
- Tools for multi-modal data analysis
- Case study: Integrating video and physiological sensors in sports research

Module 7: Data Visualization & Reporting

- Visualization techniques for video-derived insights
- Interactive dashboards and graphs
- Automated report generation from video analytics
- Presenting findings to stakeholders
- Case study: Dashboard for analyzing retail customer behavior

Module 8: Ethical, Legal & Advanced Applications

- Ethics and privacy in video-based research
- Legal compliance for sensitive data
- Cutting-edge trends in predictive video analytics
- Future of video data in research innovation
- Case study: AI ethics in analyzing workplace video data

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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