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Sommario/riassunto	This book offers both theoretical insights and hands-on experience in understanding and building machine learning-based Network Traffic Monitoring and Analysis (NTMA) and Video Quality Assessment (VQA) applications using JavaScript. JavaScript provides the flexibility to deploy these applications across various devices and web browsers. The book begins by delving into NTMA, explaining fundamental concepts and providing an overview of existing applications and research within this domain. It also goes into the essentials of VQA and offers a survey of the latest developments in VQA algorithms. The book

includes a thorough examination of machine learning algorithms that find application in both NTMA and VQA, with a specific emphasis on classification and prediction algorithms such as the Multi-Layer Perceptron and Support Vector Machine. The book also explores the software architecture of the NTMA client-server application. This architecture is meticulously developed using HTML, CSS, Node.js, and JavaScript. Practical aspects of developing the Video Quality Assessment (VQA) model using JavaScript and Java are presented. Lastly, the book provides detailed guidance on implementing a complete system model that seamlessly merges NTMA and VQA into a unified web application, all built upon a client-server paradigm. By the end of the book, you will understand NTMA and VQA concepts and will be able to apply machine learning to both domains and develop and deploy your own NTMA and VQA applications using JavaScript and Node.js. What You Will Learn What are the fundamental concepts, existing applications, and research on NTMA? What are the existing software and current research trends in VQA? Which machine learning algorithms are used in NTMA and VQA? How do you develop NTMA and VQA web-based applications using JavaScript, HTML, and Node.js? .