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Titolo	Theoretical and computational aerodynamics // Tapan K. Sengupta
Pubbl/distr/stampa	Chichester, England : , : Wiley, , 2015 ©2015
ISBN	1-118-78757-9 1-118-78754-4
Descrizione fisica	1 online resource (519 p.)
Collana	Aerospace Series
Disciplina	629.132/3001
Soggetti	Aerodynamics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Theoretical and Computational Aerodynamics; Contents; Series Preface; Preface; Acknowledgements; 1 Introduction to Aerodynamics and Atmosphere; 1.1 Motivation and Scope of Aerodynamics; 1.2 Conservation Principles; 1.2.1 Conservation Laws and Reynolds Transport Theorem (RTT); 1.2.2 Application of RTT: Conservation of Linear Momentum; 1.3 Origin of Aerodynamic Forces; 1.3.1 Momentum Integral Theory: Real Fluid Flow; 1.4 Flow in Accelerating Control Volumes: Application of RTT; 1.5 Atmosphere and Its Role in Aerodynamics; 1.5.1 Von Karman Line; 1.5.2 Structure of Atmosphere 1.5.3 Armstrong Line or Limit 1.5.4 International Standard Atmosphere (ISA) and Other Atmospheric Details; 1.5.5 Property Variations in Troposphere and Stratosphere; 1.6 Static Stability of Atmosphere; Bibliography; 2 Basic Equations of Motion; 2.1 Introduction; 2.1.1 Compressibility of Fluid Flow; 2.2 Conservation Principles; 2.2.1 Flow Description Method: Eulerian and Lagrangian Approaches; 2.2.2 The Continuity Equation: Mass Conservation; 2.3 Conservation of Linear Momentum: Integral Form; 2.4 Conservation of Linear Momentum: Differential Form 2.4.1 General Stress System in a Deformable Body 2.5 Strain Rate of Fluid Element in Flows; 2.5.1 Kinematic Interpretation of Strain Tensor; 2.6 Relation between Stress and Rate of Strain Tensors in Fluid Flow;

2.7 Circulation and Rotationality in Flows; 2.8 Irrotational Flows and Velocity Potential; 2.9 Stream Function and Vector Potential; 2.10 Governing Equation for Irrotational Flows; 2.11 Kelvin's Theorem and Irrotationality; 2.12 Bernoulli's Equation: Relation of Pressure and Velocity; 2.13 Applications of Bernoulli's Equation: Air Speed Indicator; 2.13.1 Aircraft Speed Measurement; 2.13.2 The Pressure Coefficient; 2.13.3 Compressibility Correction for Air Speed Indicator; 2.14 Viscous Effects and Boundary Layers; 2.15 Thermodynamics and Reynolds Transport Theorem; 2.16 Reynolds Transport Theorem; 2.17 The Energy Equation; 2.17.1 The Steady Flow Energy Equation; 2.18 Energy Conservation Equation; 2.19 Alternate Forms of Energy Equation; 2.20 The Energy Equation in Conservation Form; 2.21 Strong Conservation and Weak Conservation Forms; 2.22 Second Law of Thermodynamics and Entropy; 2.23 Propagation of Sound and Mach Number; 2.24 One-Dimensional Steady Flow; 2.25 Normal Shock Relation for Steady Flow; 2.26 Rankine-Hugoniot Relation; 2.27 Prandtl or Meyer Relation; 2.28 Oblique Shock Waves; 2.29 Weak Oblique Shock; 2.30 Expansion of Supersonic Flows; Bibliography; 3 Theoretical Aerodynamics of Potential Flows; 3.1 Introduction; 3.2 Preliminaries of Complex Analysis for 2D Irrotational Flows: Cauchy-Riemann Relations; 3.2.1 Cauchy's Residue Theorem; 3.2.2 Complex Potential and Complex Velocity; 3.3 Elementary Singularities in Fluid Flows; 3.3.1 Superposing Solutions of Irrotational Flows; 3.4 Blasius' Theorem: Forces and Moment for Potential Flows; 3.4.1 Force Acting on a Vortex in a Uniform Flow

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Sommario/riassunto

Theoretical and Computational Aerodynamics is a comprehensive textbook covering classical aerodynamic theories and recent applications made possible by computational aerodynamics. Logically ordered for use in courses, the first seven chapters deal with classical methods of analysis up to the panel method and boundary layer solutions. The rest of the book is devoted to aspects of flow past aerodynamic surfaces from computational aspects to natural laminar flow (NLF) airfoils; transonic flows; flow control by active and passive devices. There is also a chapter devoted to low Reynolds number ae

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2. Record Nr.	UNINA9910320754203321
Titolo	Museums in a digital culture : how art and heritage become meaningful // edited by Chiel van den Akker and Susan Legene
Pubbl/distr/stampa	Amsterdam, [Netherlands] : , : Amsterdam University Press, , [2016] [2016]
ISBN	90-485-2480-6
Descrizione fisica	1 online resource (142 pages) : illustrations, photographs
Classificazione	20.12
Disciplina	069.0285
Soggetti	Museums - Information technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover -- Contents -- Introduction: Museums in a Digital Culture: How Art and Heritage Become Meaningful / Chiel van den Akker and Susan Legene -- 1. Touched from a Distance: The Practice of Affective Browsing / Martijn Stevens -- 2. Visual Touch: Ekphrasis and Interactive Art Installations / Cecilia Lindhe -- 3. Breathing Art: Art as an Encompassing and Participatory Experience / Christina Grammatikopoulou -- 4. Curiosity and the Fate of Chronicles and Narratives / Chiel van den Akker -- 5. Networked Knowledge and Epistemic Authority in the Development of Virtual Museums / Anne Beaulieu and Sarah de Rijcke -- 6. Between History and Commemoration: The Digital Monument to the Jewish Community in the Netherlands / Serge ter Braake -- 7. From the Smithsonian's MacFarlane Collection to Inuvialuit Living History / Kate Hennessy -- Conclusion / Chiel van den Akker -- Notes on Contributors -- Index -- List of Figures -- Figure 1 -- Philip James De Louthembourg. The Vision of the White Horse 1798 -- Figure 2 -- Char Davies. Breathing and balance interface used in the performance of immersive virtual reality environments Osmose (1995) and Ephemere (1998) -- Figure 3 -- Char Davies. Forest Grid, Osmose (1995). Digital still captured in real-time through HMD (head-mounted display) during live performance of the immersive virtual environment Osmose -- Figure 4 -- George Khut. Cardiomorphologies v.2 (2005). Interactive installation -- Figure 5 -- Christa Sommerer and Laurent Mignonneau. Mobile Feelings II (2003).

Interface devices -- Figure 6 -- Anton Raphael Mengs (1772/73). The Triumph of History over Time: Allegory of the Museum Clementinum. Ceiling fresco in the Camera dei Papiri, Vatican Library -- Figure 7 -- Screenshot from the Digital Monument to the Jewish Community.

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## Sommario/riassunto

The experience of engaging with art and history has been utterly transformed by information and communications technology in recent decades. We now have virtual, mediated access to countless heritage collections and assemblages of artworks, which we intuitively browse and navigate in a way that wasn't possible until very recently. This collection of essays takes up the question of the cultural meaning of the information and communications technology that makes these new engagements possible, asking questions like: How should we theorise the sensory experience of art and heritage? What does information technology mean for the authority and ownership of heritage?

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