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Topical Feature:
Computer-Aided Design
Discovery

We SHARE to inspire and ignite idea

The titles featured here are to give you a peek into the wealth of resources we have. We hope, through this will encourage you to explore and read further. Share with us trending topics and we can introduce relevant titles from some 400,000 eBooks we carry & other publications from the wealth of resources.

September 2016

INTRODUCTION

Computer-aided engineering

Unsure what Computer-aided design or (CAD is? Britannica Online gives you a comprehensive introduction.

Source: Britannica Online

AWARDS

Liz Diller awarded 2016 ACADIA Lifetime Achievement Award

The Association for Computer Aided Design in Architecture (ACADIA) has announced Elizabeth Diller is the proud recipient of the prestigious 2016 ACADIA Lifetime Achievement Award.

Source: The Architects Newspaper (July 2016)

CLOUD

Collaborative CAD/CAE as a cloud service

This paper presents details of a unique collaborative computer-aided design and engineering system as a cloud service. Enabling offsite access to visualisations of a project, enhancing collaborative work.

Source: International Journal of Systems Science : Operations & Logistics (May 2016)
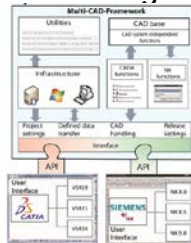
DESIGN

The buildings that would have been impossible

A write up that traces how computer aided design was first conceived and paved the way to design complex buildings.

Source: BBC News Magazine (December 2014)

FRAMEWORK

Multi-CAD approach for knowledge-based design methods

An approach that provides a platform for the efficient development of Knowledge-based design applications for multi-CAD environments.

Source: Computer Aided Design and Applications (January 2016)

FUNDAMENTALS

CAD Fundamentals for Architecture

This book helps you to acquire the essential CAD skills required to create plans, 3D models, and perspectives.

Source: Ebrary (October 2013)

MACHINE LEARNING

An Assessment of CAD's Role in Knowledge Formation in Architecture/Architectural Engineering Discipline

There is not much advancement in packaging of architectural information but a new study shows that CAD systems could lead in augmenting knowledge formation in this area.

Source: Computer-Aided Design and Applications (August 2013)

Computational Design

Robotic Fabrication Of Acoustic Brick Walls

This "Acoustic Brick Wall" demonstrates the feasibility of utilizing computational design to create wall structures that maximise acoustics regardless of the materials used.

Source: Acadia (October 2014)

SINGAPORE

Virtual Singapore

Virtual Singapore is a dynamic three-dimensional (3D) city model and collaborative data platform.

Source: National Research Foundation Singapore (December 2014)

SINGAPORE

HDB estates planned using computer simulation

Town Planners leveraged on Urban Environmental Modelling (UEM) tool to create computer simulations to assess the environmental performance of public housing estates.

Source: The New Paper (March 2016)
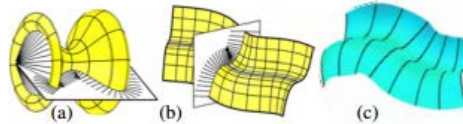
SOFTWARE

ArchiCAD: Management & Collaboration

Learn how to use an award-winning BIM tool ArchiCAD. This software allows users to share and collaborate with others easily.
Get your free trial here

Source: Lynda.com (August 2016)

SOFTWARE

Soft Modelling - Open source Java application for flexible structural systems

A discussion on the design and evolution of the open source software Soft Modelling on how it integrates physical simulations in every step of the design.

Source: CumInCAD (2016)

STANDARDS

United States National CAD Standard – V6

Check of the American standards for CAD. These are formed by collaboration across various National design and construction institutions. These standards suggest best practises to save time and costs.

Source: United States of National CAD Standards (September 2014)

SURFACES

Detection and reconstruction of freeform sweeps
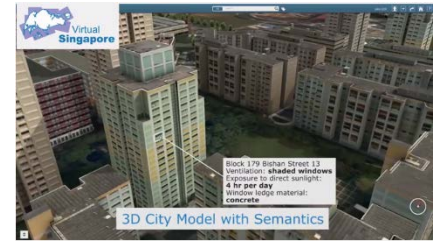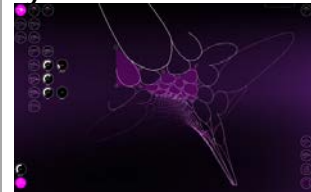

By deconstructing CAD models, freeform surfaces can be more easily manufactured.

Source: Computer graphics Forum (May 2014)

TRENDS

CAD Management Predictions for 2016

Provides CAD market trends and predictions for 2016 based on industry personnel, clients and readers.

Source : Cadalyst (January 2016)

TRENDS

Global CAD and Modelling Software Market

F R O S T & S U L L I V A N

A detailed 131 page report that looks into the growth drivers as well as challenges for the CAD and Modelling software market.

Source: Frost & Sullivan (January 2013)

TUTORIALS

Become an Architecture CAD Technician

An eLearning course by Lynda.com to help you learn to create impressive blueprints through a series of self-learning tutorials.

Source: Lynda.com

TUTORIALS

Mastering Autodesk Revit 2017 for Architecture

Practical tutorials that walk you through the phases of a project, and provide foundation on BIM concepts.

Source: Safari Tech and Business Books Online (June 2016)

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