



Arsitektur Digital Sudah Datang

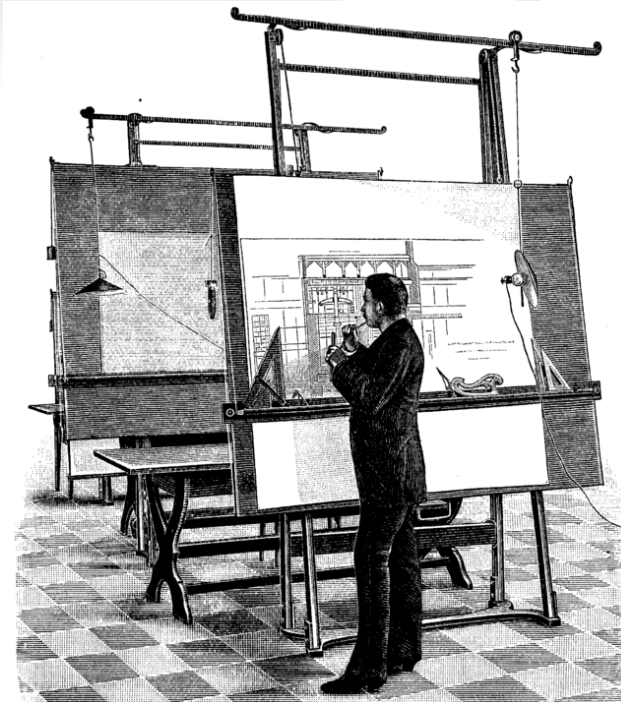
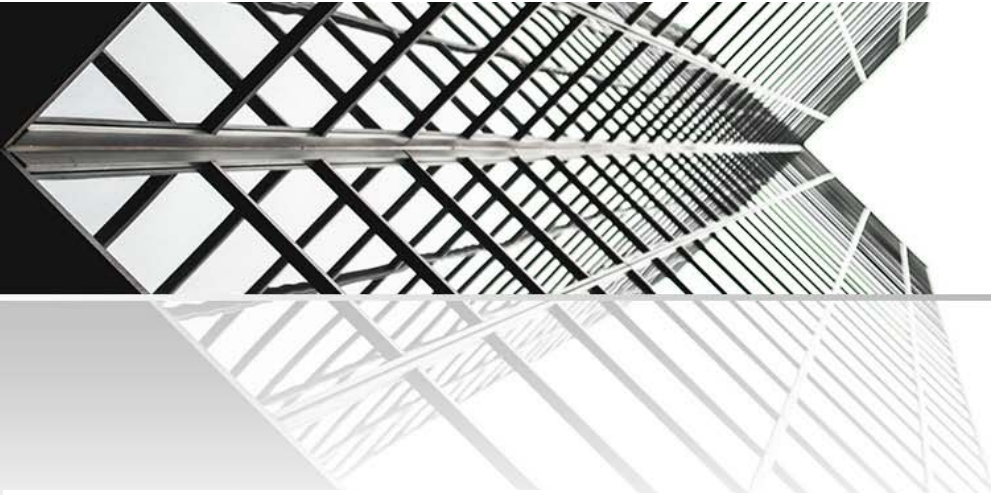
Prof. Dr.-Ing. L.M.F. Purwanto

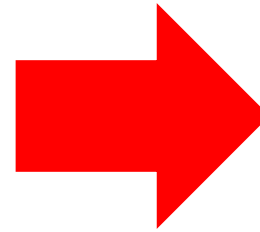
Disajikan dalam Seminar Nasional Saintek I
Universitas Pelita Bangsa
16 Juli 2022

Arsitektur tradisional



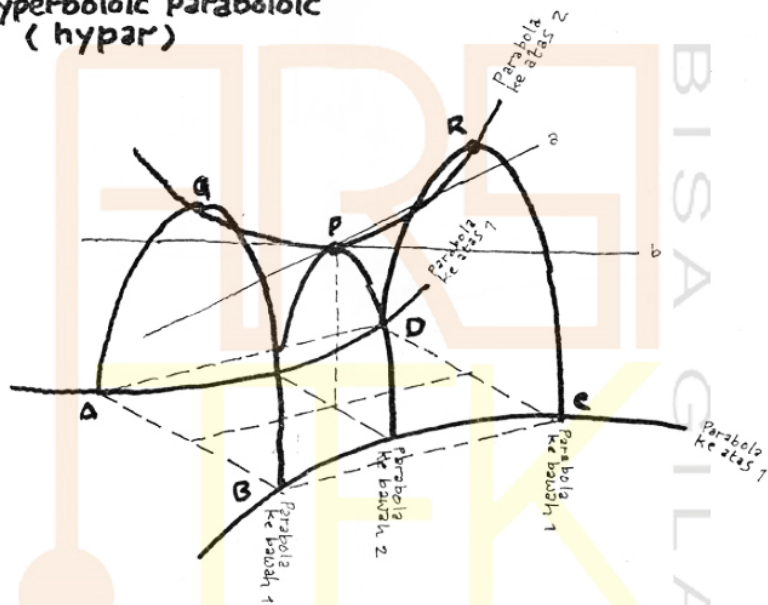
Menggambar teknik





Multidisiplin

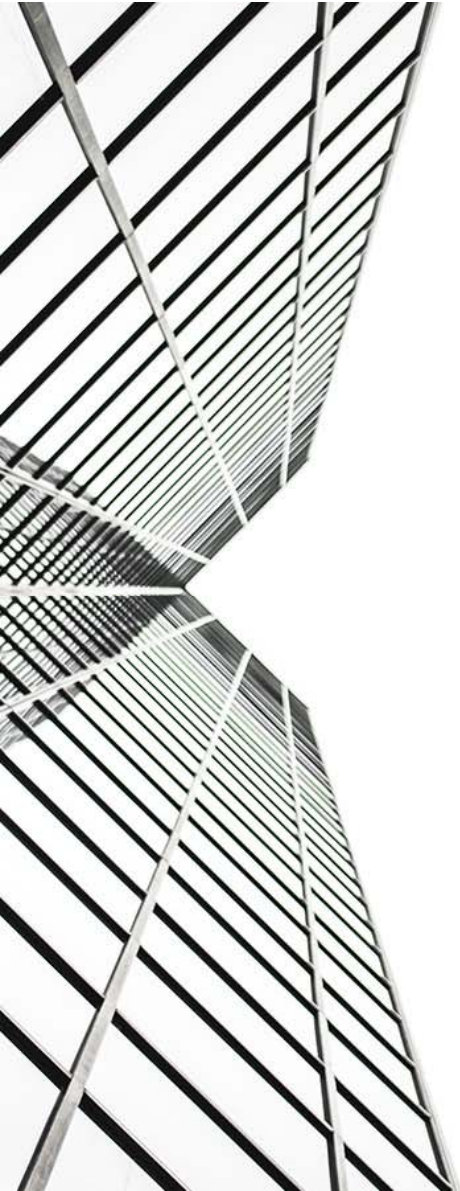
hyperbolic paraboloid
(hypar)



a) garis lurus melalui P (Puncak Parabola ke bawah 2) sebenarnya terletak pada bidang Hypar.
b)

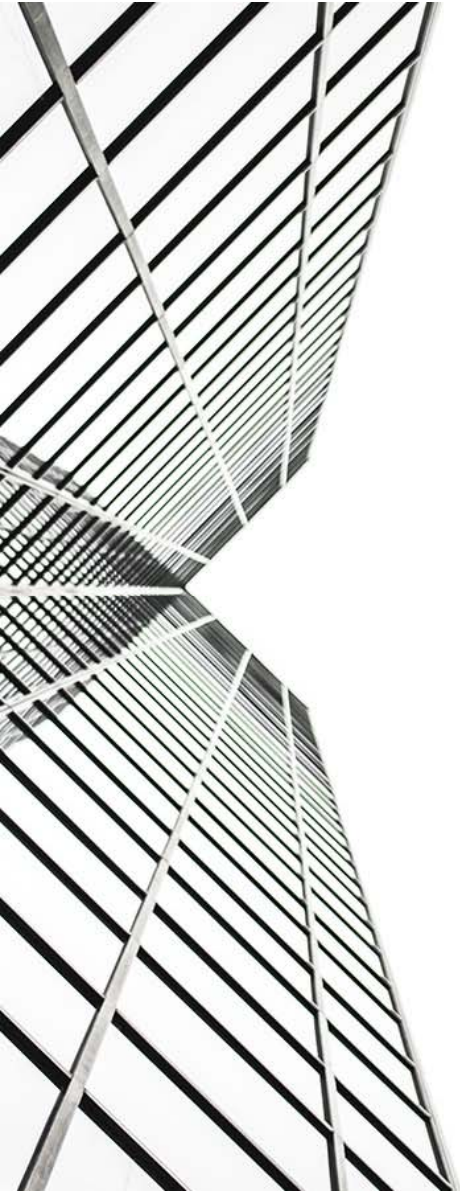
• titik P juga merupakan titik terendah dari parabola membuka ke atas 2





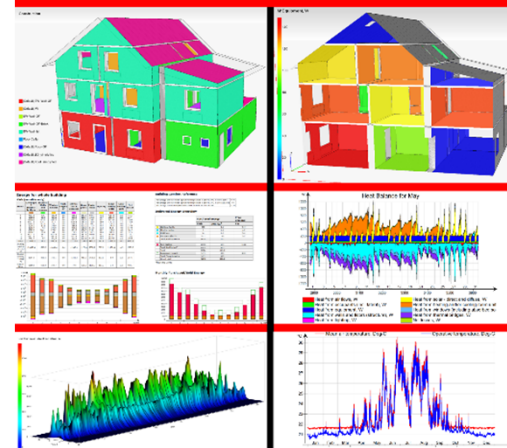
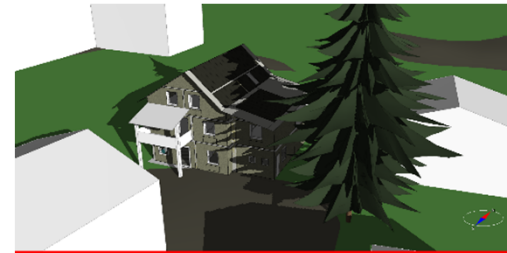
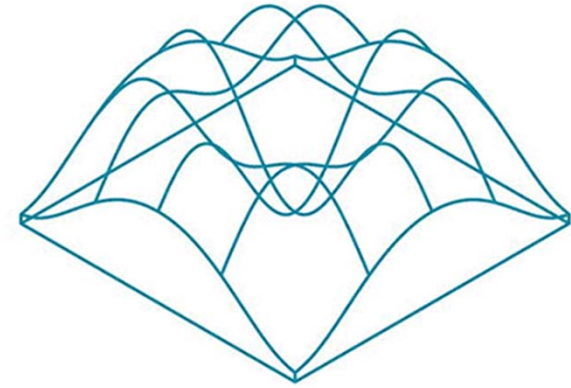
Digital Era

- Computers are **famously versatile** machines. One could use CAD/CAM technologies to mass-produce boxes and blobs, indifferently
- Today, many technologically savvy designers use **open-source software**, or exploit other collaborative aspects of networked technologies



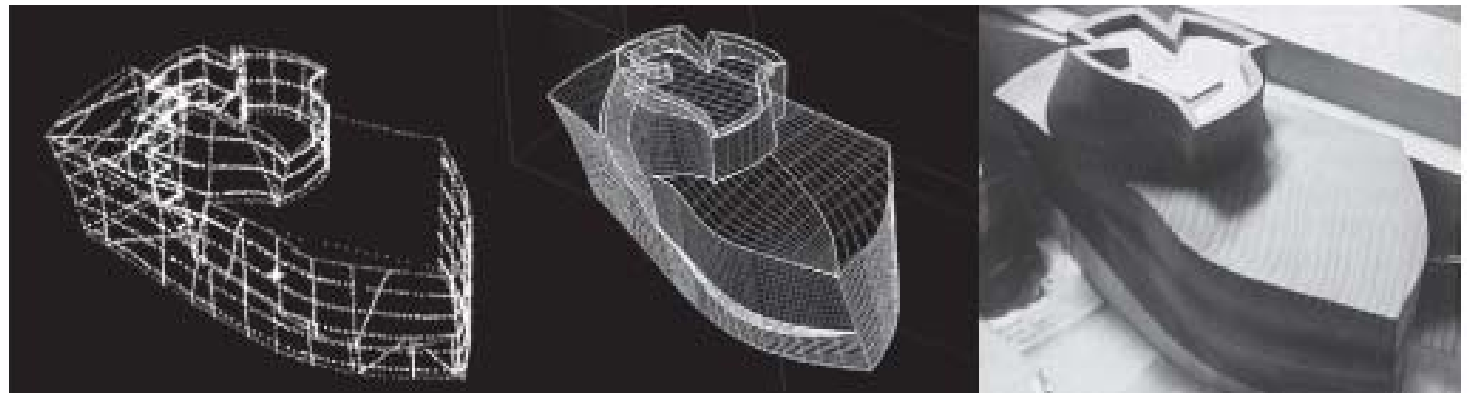
Digital Design Architecture

- Form Finding
- Building Performance
- New building material

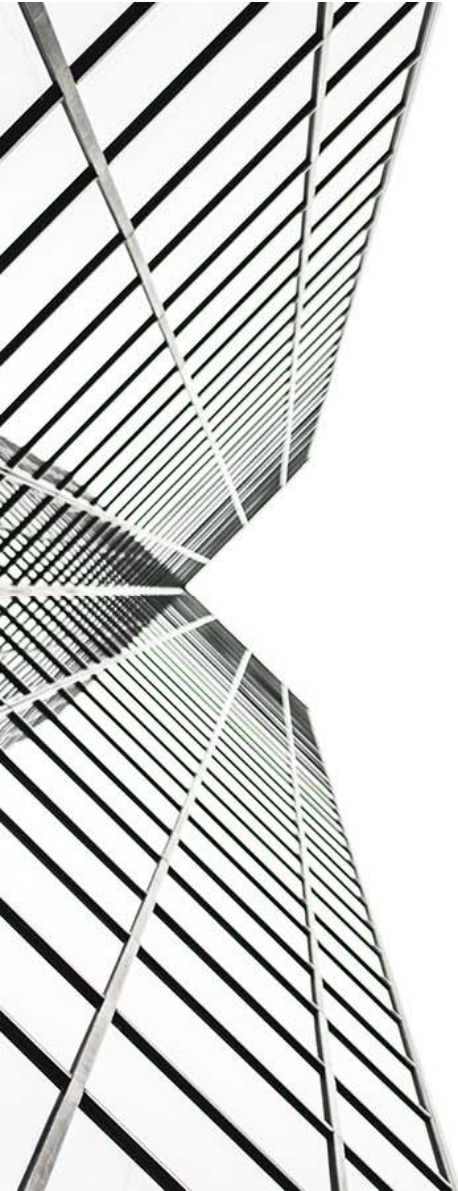


THREE-DIMENSIONAL SCANNING: FROM PHYSICAL TO DIGITAL

- digitized points
- digital surface reconstruction
- digitally fabricated model



DIGITAL FABRICATION: FROM DIGITAL TO PHYSICAL





Design in Virtual

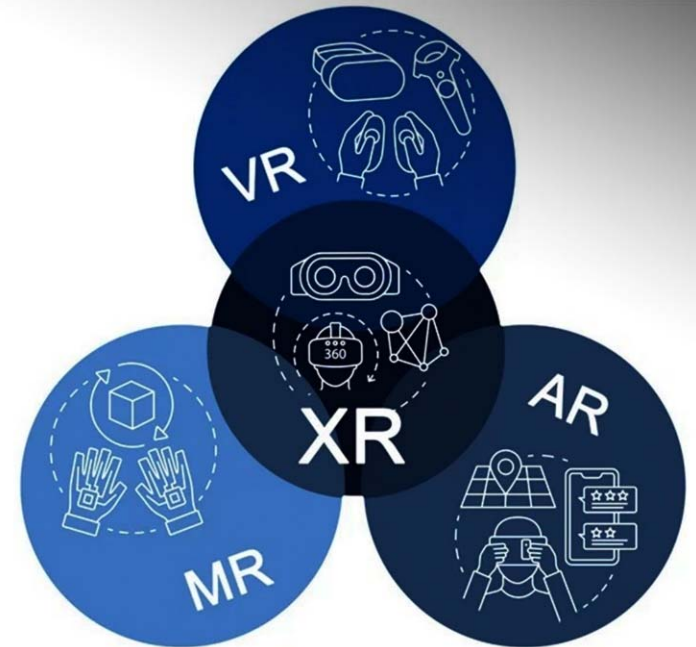


VERTISAN



Metaverse architecture

- Virtual Reality
- Augmented Reality
- Mixed Reality
- Extended Reality





S3 ARSITEKTUR DIGITAL

- Deskripsi**
- Lulusan
- Fasilitas
- Kegiatan Mahasiswa
- Mata Kuliah

Deskripsi Program

Program Studi Doktor Arsitektur Konsentrasi Arsitektur Digital berada di Fakultas Arsitektur dan Desain Universitas Katolik Soegijapranata hadir untuk menjawab perkembangan dunia yang memasuki era digital dan perkembangan keilmuan arsitektur yang banyak didukung oleh program simulasi komputer. Program Studi Doktor Arsitektur Konsentrasi Arsitektur

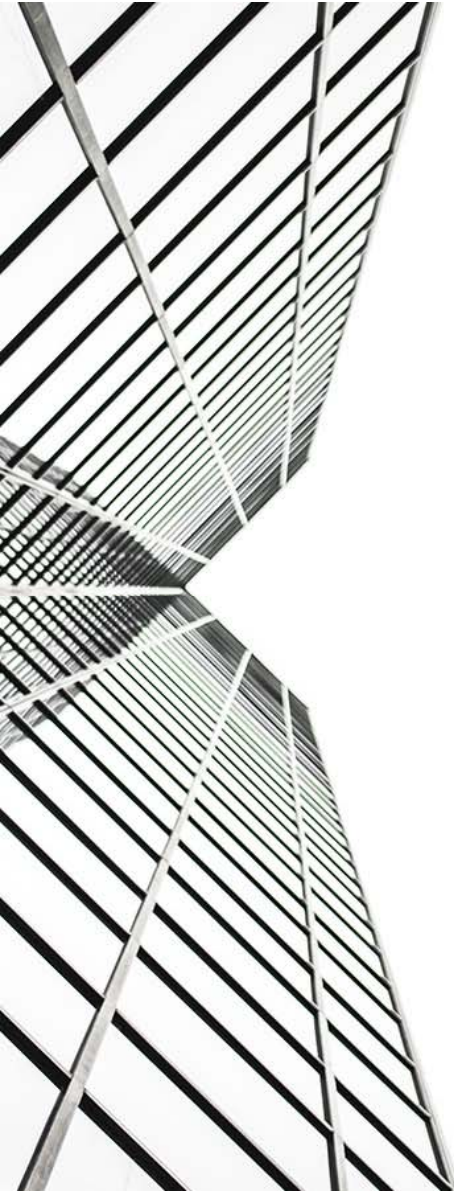
Digital berdasar Surat Keputusan Menteri Pendidikan dan Kebudayaan Republik Indonesia No 196/M/2020 berkomitmen untuk mengembangkan keilmuan dalam bidang Arsitektur digital dengan tetap memperhentikan kepedulian terhadap lingkungan

Mahasiswa Program Studi Doktor Arsitektur Konsentrasi Arsitektur Digital dapat mengembangkan penelitian disertasi dari berbagai sub bidang arsitektur

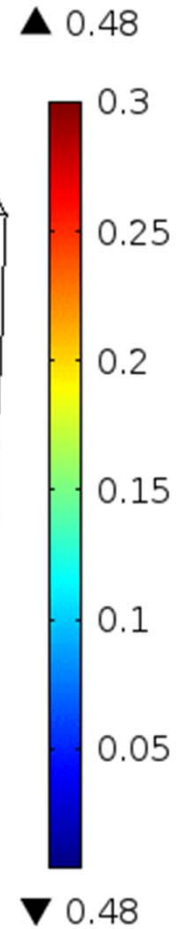
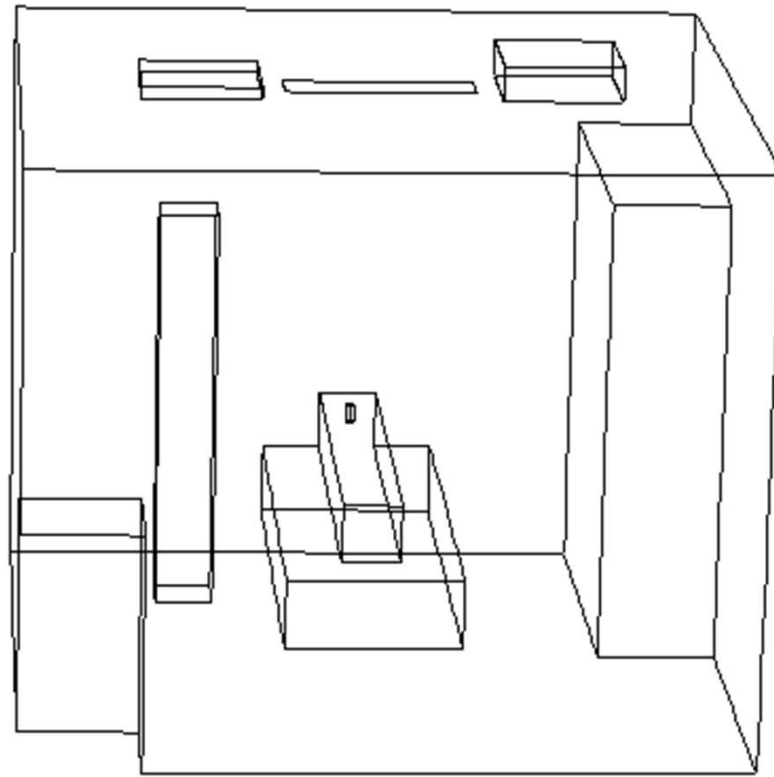
Activate Windows
Go to Settings to activate Windows.



Simulation in architecture



Time=0 s



Digital Architecture

- Unlimited form
- New lifestyle





Kita ada dimana nantinya?

- Kemampuan Arsitek tidak hanya menyajikan desain dengan **batasan** antara designer, klien dan karya, tapi akan **menyatukan** ketiganya
- Arsitek masa depan masuk ke dunia virtual dan menghadirkan dalam karya dengan **menekan risiko** sekecil mungkin

A decorative graphic on the left side of the slide. It features a grid of black and white lines that appears to be receding into the distance, creating a 3D effect. A horizontal line is drawn across the middle of the grid, and the grid continues below it, though the lines are lighter and more spaced out.

Terima Kasih