

# Shifting the Paradigm

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**Asynchronous Research Center**

Portland State University

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Offering freedom from the tyranny of the clock

# TECHNOLOGY ADVANCE

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**Problem  
Support  
Leadership**

# PARADIGM SHIFT

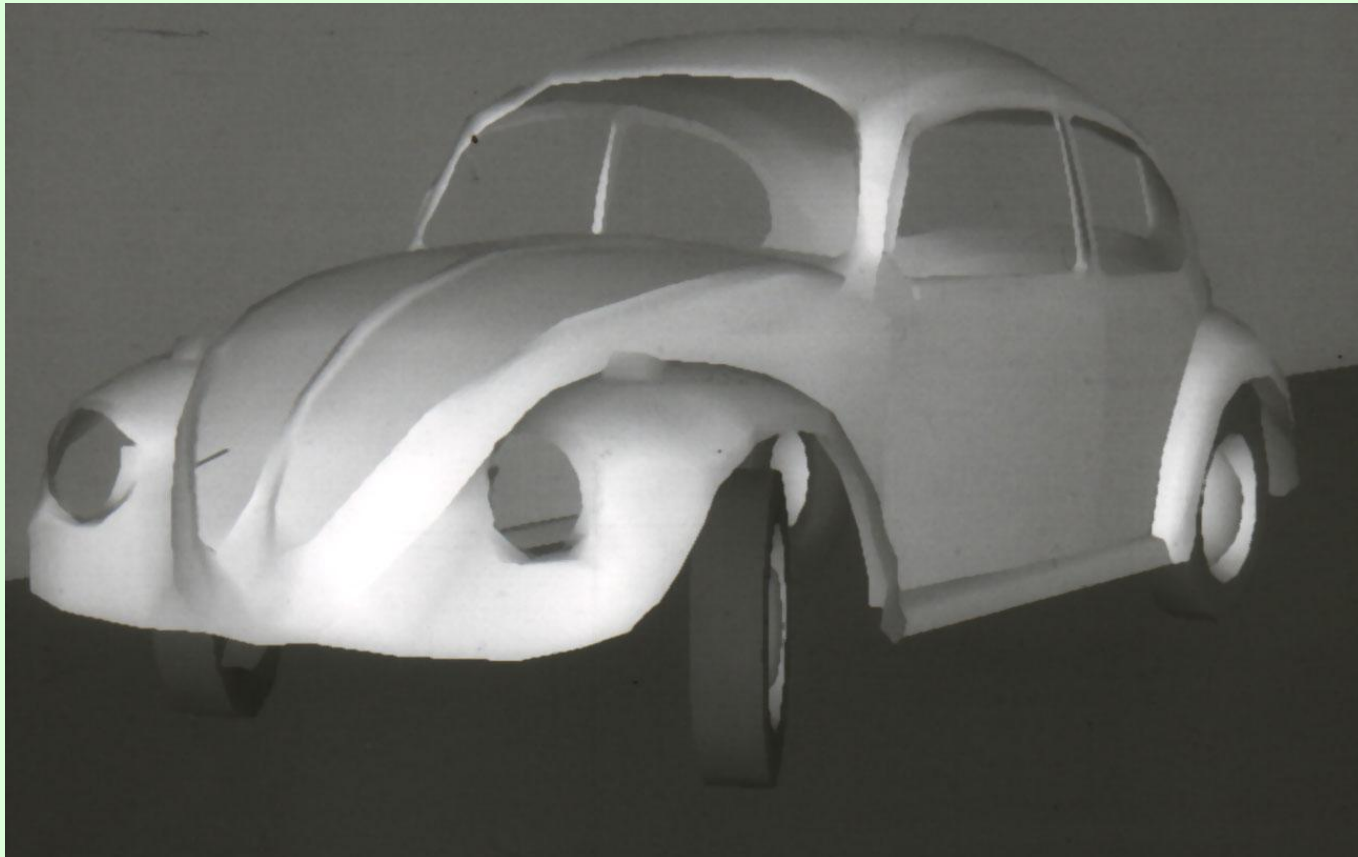
**Problem  
Support  
Leadership**

**Artifact**

# ON-LINE COMPUTING

# GRAPHICS

# Gouraud Shading



# Gathering Data

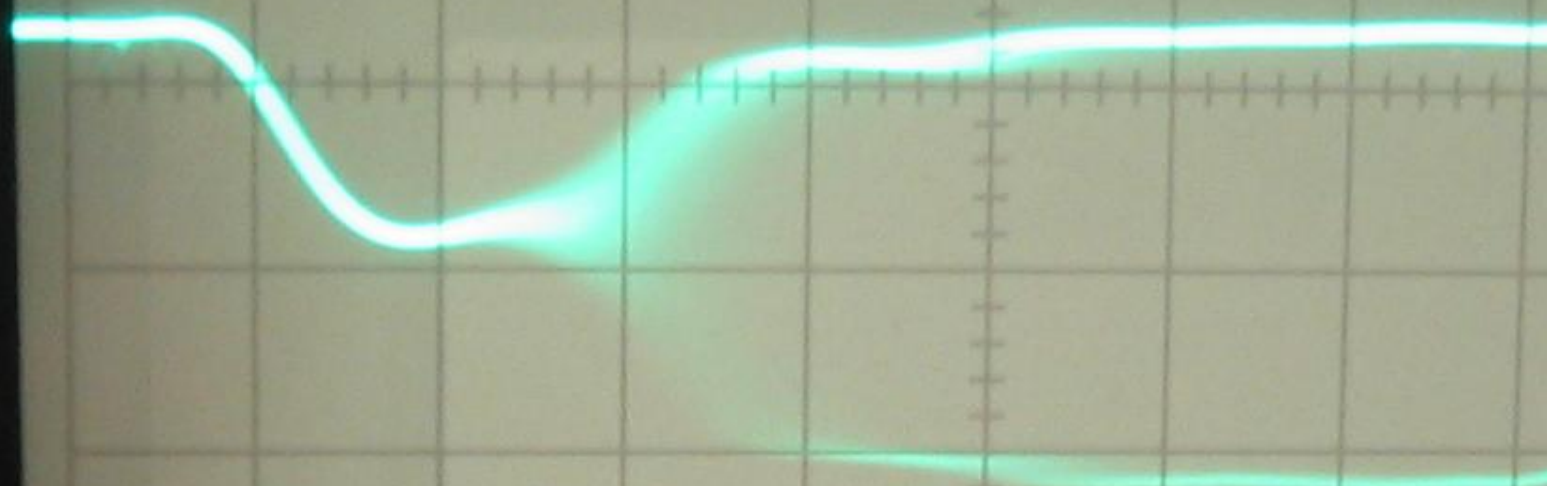




# THE NETWORK

# BROWSER

# METASTABILITY



S/DIV CH 1

STEP  
ATTEN



POSITION

CH 2 VOLTS

# The Trombone



# INTEGRATED CIRCUITS

# **ADVICE**

**Find Champions**

**Their Ideas**

**Beware the Incumbent**

**Allow Time**

**Make Artifacts**

**Empower Youth**

**NOT TO RETIRE**





# SEQUENTIAL COMPUTING

# QUANTIZED TIME

# PUBLIC FUNDS



# About the ARC at Portland State

- People
  - > Marly Roncken (ex Philips & Intel) now PSU – CS Dept
  - > Ivan Sutherland (ex Sun) now PSU – ECE Dept
- Sponsorship
  - > College of Engineering, Portland State University
  - > Sun Microsystems
  - > Seeking additional sponsors
- What we do
  - > Collect tools
  - > Teach
  - > Design Driver – the subject of this talk

# Questions?