

Intel Visual Computing Institute

A New Hub in Europe for Worldwide Innovation

Justin Rattner

Intel Sr. Fellow and Vice President,
Chief Technology Officer



Visual Computing - 3D *and More*



Looks real, acts real, sounds real, and feels real

Converging Trends

Immersive Connected Experiences



**VISUAL
COMPUTING**



**SOCIAL
NETWORKING**



**USER-
GENERATED
CONTENT**



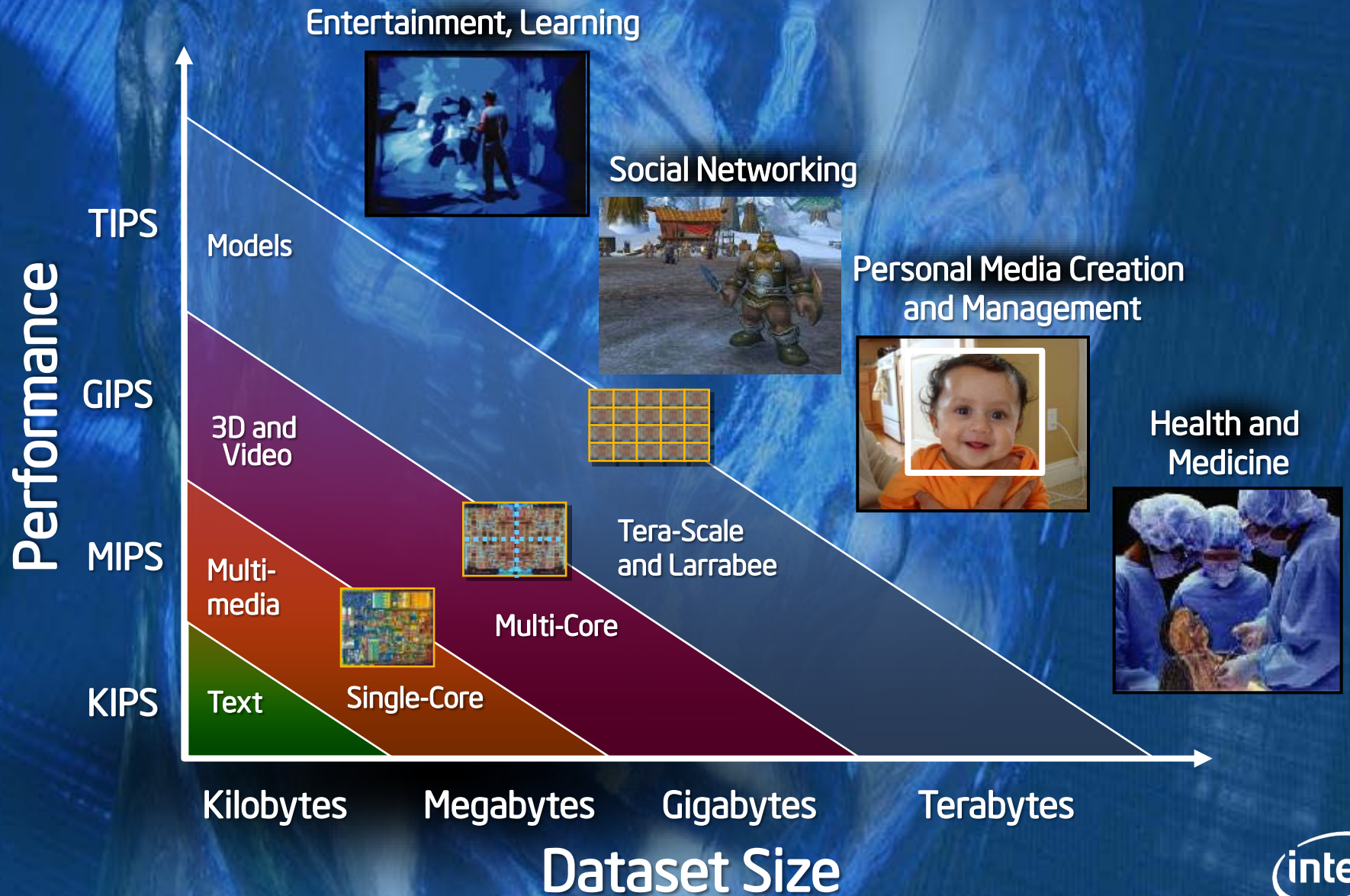
**BROADBAND
CONNECTIVITY**



**MOBILE
COMPUTING**



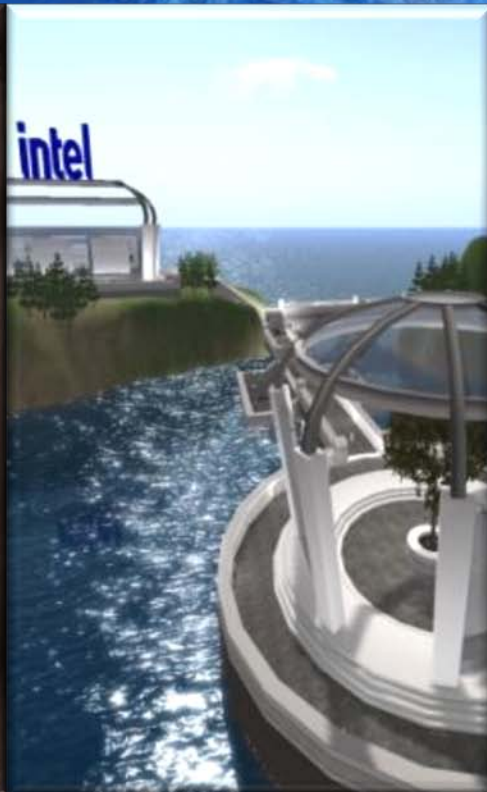
Extraordinary Performance Demands



Research Challenges for Visual Computing



Realistic Images, Behaviors, and Sounds



Infrastructure for the 3-D Internet



User 3-D Content Creation



Computational Perception



Intel VCI Research Themes

Advanced Rendering and Visualization Technologies



Acquisition and Processing of Real-World Geometry

3D Internet and Novel Networking Approaches



Motion Capture of the Human Body

Sample-based Data Representations



Content- and Context-aware Visual Interaction

Visual Simulations

Virtual Humans



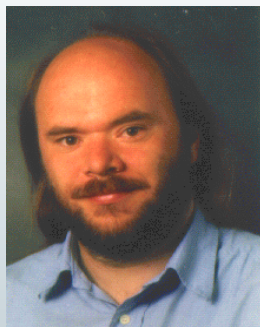
The Intel Visual Computing Institute

Saarland University - Saarbrücken, Germany

\$12 Million funding from Intel

A dozen researchers in 2009. 5x in 5 years

New research hub to advance visual computing



Philipp Slusallek
UdS



Thorsten Herfet
UdS / Intel



Jim Hurley
Intel



Along with

The Max-Planck Institute for Informatics

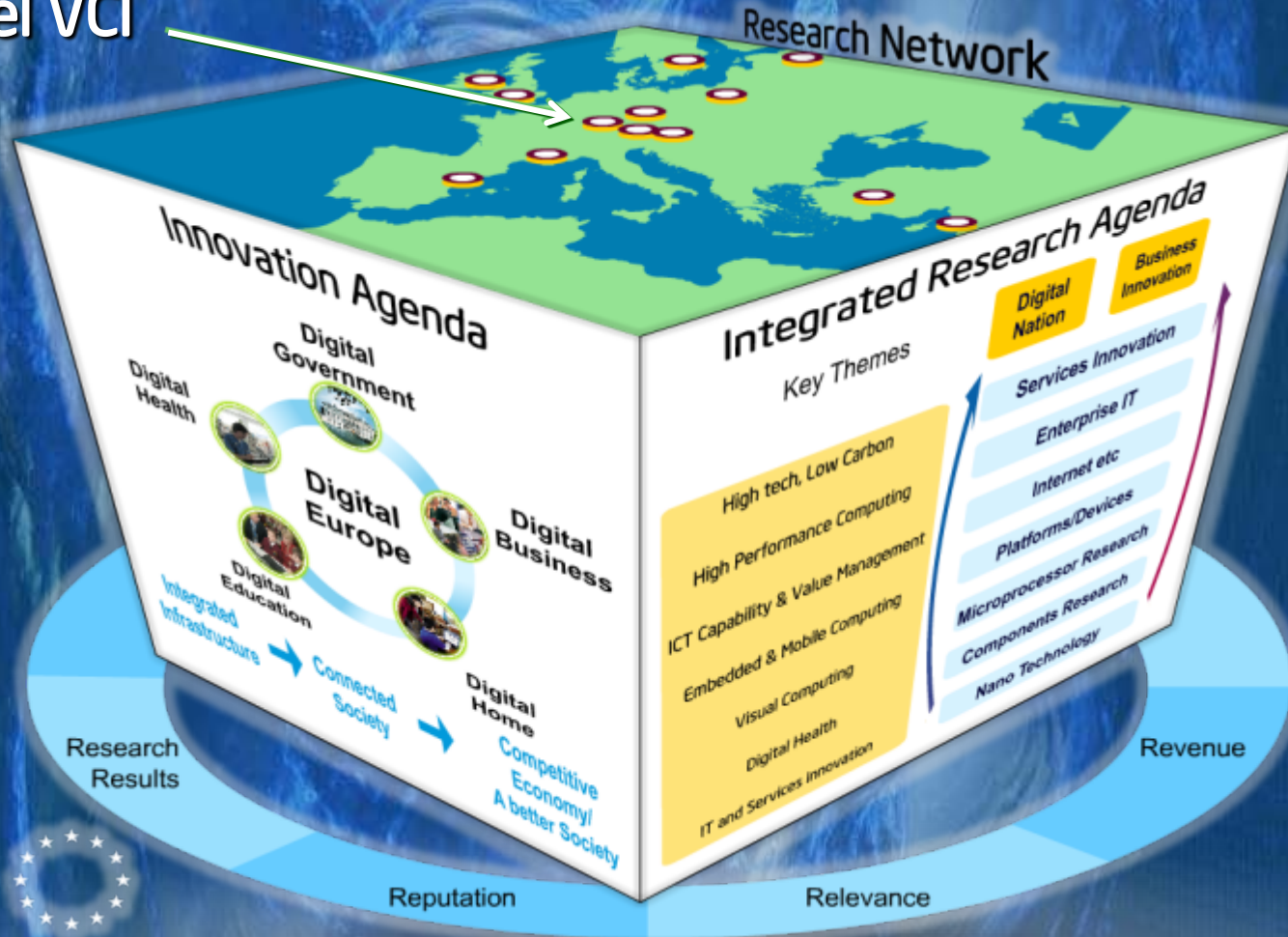
The Max-Planck Institute for Software Systems

The German Research Center for Artificial Intelligence



Intel Labs Europe

Intel VCI



Partnering with Europe to address major research challenges

