



About CSAIL

Largest Interdepartmental Lab

>800 members
>90 PIs from 8 departments
~450 students

Distinguished Members

68 Professional Society Fellows
33 NAE/NAS/IM members
6 MacArthur Fellows
4 Turing Awards
2 Nevanlinna Prizes
1 Millennium Technology Award
Many best paper/thesis Awards
...

A History of Innovation

Early innovations

Time sharing, public-key encryption, bit-mapped displays, workstations, networks, computer architecture, computer vision, robotics, speech, WWW, ...

Standards setting

TCP/IP. GNU, X-windows, WWW

Spin-offs

Akamai, Ascent Technology, Bluespec, Boston Dynamics, Determina (to VMware), iRobot, ita, Meraki, RSA (to EMC), Sandburst (to Broadcom), Sight Path (to Cisco), Scalable Display, Speechworks (to Nuance), Tiler, ...

Meta-Computing: Computers Watching Themselves



Problem	Computer can't tell right from wrong. All it has is <i>"Raw Seething Bits"</i>
Solution	All data is tagged with Meta-Data Data-type, Bounds, Compartment, Provenance
Implementation	Hardware "Tag Management Unit" Enforces semantic and Access Control Rules
Result	Eliminate > 90% of common vulnerabilities Less than 10% overhead, no performance hit

Add 1



Store 20 into Slot 5



Change 1st Name to Howard

