

Connected Brains and Distributed Cognition

How We're Creating The Autonomous Future

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Cognitive Science B.S. '94

amazing time to be alive

Cognitive Science

Applied Cognitive Science

dystopian future

humans *and* autonomous systems

creativity *and* joy

“The best way
to predict the future
is to create it.”

Alan Kay

think

how

think

how

why

think

how

why

what

think

how

why

what

think

how

why

what

know

Cognitive Science

Marta Kutas

Don Norman

Pat Churchland

Ed Hutchins

David Zipser

Gilles Fauconnier

David Kirsh

Jaime Pineda

*make the world smarter by
understanding thinking*

fascinated by thinking
inspiration

committed to elevating others
value

drive hard on the path
ability

Applied Cognitive Science

software

systems

distributed systems

[diagram of n-tier
architecture]

cognition

internet gateways to expert systems

internet gateways ~~to expert systems~~

systems of systems

distributed architecture

distributed architecture

internet *companies*

photo
app

banking
app

travel
app

middleware

database

transaction
processor

object
storage

output

output

output

hidden layer

input

input

input

systems of systems

Marta Kutas

Don Norman

Pat Churchland

Ed Hutchins

David Zipser

Gilles Fauconnier

David Kirsh

Jaime Pineda

distributed cognition

Open Source

system of people

system of people
systems of code

system of people

systems of code

systems of systems

fascinated by thinking
inspiration

committed to elevating others
value

drive hard on the path
ability

Connecting brains is
the most powerful thing we can do.

Connecting brains is
non-trivial.

Humans have an operating system!

Mood

Mood

Listening

Mood

Listening

Safety

Mood

Listening

Safety

Play

Learning Organization

system of people

systems of code

systems of systems

systems of systems

systems of code

system of people

system of people

systems of code

systems of systems

systems of systems

systems of code

system of people



system of people

systems of code

systems of systems

*this is a
platform*

A curved arrow originates from the text 'this is a platform' and points towards the right end of the horizontal line, indicating that the line represents a platform.

Google

distributed cognition

autonomous companies

understand how the whole thing works

Meta

Twitter

Amazon

Uber

Google

first-generation
autonomous companies

focusing on the task and not the human

awful lot of harm to an awful lot of people

next-generation
autonomous companies

humans *and* autonomous systems

creativity *and* joy

are we creating work that gives people
a chance to be joyful?

are we creating experiences that elevate
the user without harming them as a whole?

Let's use our hearts and our brains to
build a future we want to live in.