

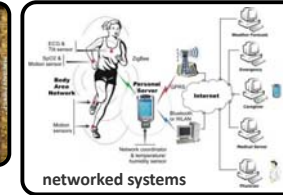
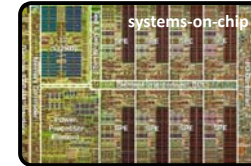
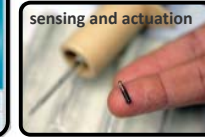
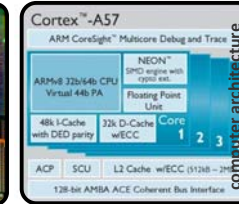
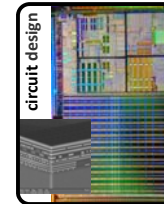
Explore your Master(s)

Electronic Systems

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Mission

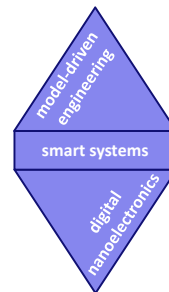
- Scientific basis for design trajectories
- From function to realization
- Constructive design



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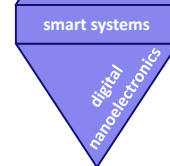
- SDF3: Model-driven synthesis of data-processing applications
- POOSL: Fast discrete-event simulation
- Embedded control and signal processing
- Health monitoring
- CompSOC: Predictable multiprocessor platforms
- GPUs and accelerators
- Brain-inspired computing
- Ultra-low power electronics



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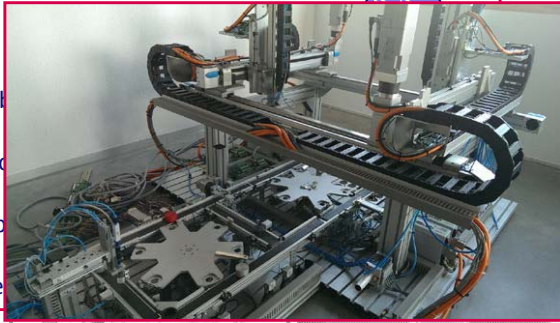
- SDF3: Model-driven synthesis of data-processing applications
- POOSL: **Proposition 3.2** For any matrix G , vectors γ and δ and scalar K : $\gamma \preceq K - G^T \delta$ if and only if $G\gamma \preceq K - \delta$.
- Embed
- Health *Proof* Because of linearity of the equations, we may assume w.l.o.g. that $K = 0$. We proceed ...
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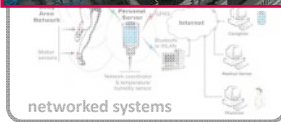
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model-driven engineering



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model-driven engineering

smart systems

digital nanoelectronics

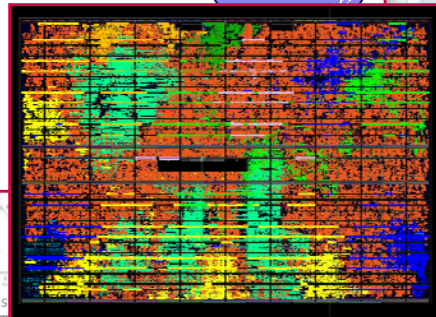
chip fabrication



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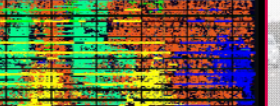
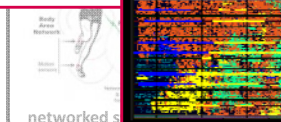
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model-driven engineering

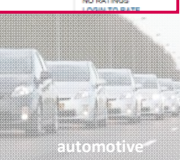
smart systems



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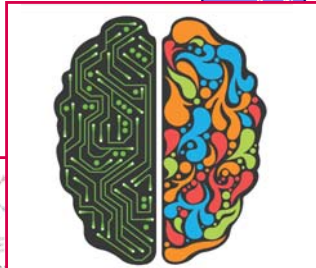
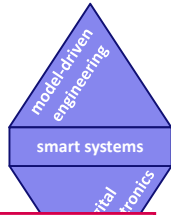
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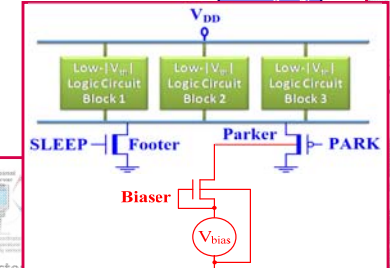
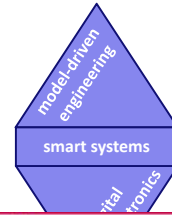
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Electronic Systems



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PhD students

PDEng students

you ?

MSc students

Postdocs, support staff, etc

FLUX Floor 4

Marja de Mol

Electronic Systems

1 2 3

5EIA0 - Computation I: HW/SW Int 5EIB0 - Computation II: ES Design	Master EE 2DME10 - Discrete Math 5SIA0 - Emb Comp Arch 5SIB0 - Electr Design Autom	PDEng PhD
5XIB0 - Venus Exploration Project 5XIC0 - Electronic Systems Engineering 5XID0 - Nature-inspired Control 5XIE0 - Computational Networks	5LIA0 - Emb Visual Control 5LIC0 - Networked ES 5LID0 - Systems on Silicon 5LIE0 - Multiprocessors 5LIF0 - Adv Dig Circ Design 5LIG0 - Applied Combinat Alg 5LIH0 - Digit Int Circ Design 5LIJ0 - Emb Control Syst 5LIK0 - Emb Sign Proc Syst 5LIL0 - Intelligent Arch 5LIM0 - Par, Comp, Platforms 5LIN0 - Video Processing	
Bachelor EE		
Bachelor AU 5AIA0 - Computation: Automotive 5AIB0 - Sensing, Comput, Actuating 5AIC0 - Vehicle Networking	5SIA0 - Emb Comp Arch 5LIB0 - ES lab Master ES Other masters Master AU	

ES – a unique profile – master EE core courses

	Analysis	Discrete mathematics	Optimization	Semiconductors	Random signals	Physics	Computational Physics	Dynamics
CS	◆		◆		✓		✓	◆
ECO	◆			◆	◆	✓	✓	✓
PHI				◆	◆	✓		
EES	✓		✓	◆	◆	◆	✓	◆
EPE	◆		✓	◆	◆	◆	✓	✓
EM	◆		✓	◆		◆	◆	
ES		◆	✓	✓	✓		✓	✓
MSM				◆	◆	✓	◆	✓
SPS	✓		◆		◆		✓	✓

◆ = important ✓ = preferred

ASML

océ

NXP

PHILIPS

VDL

FEI

TNO innovation for life

IBM

Embedded Systems Innovation BY TNO

ST

ARM

Holst Centre Open Innovation by imec and TNO

THALES

intel

imec

ERICSSON

prodrive

dialog SEMICONDUCTOR

RECORE

ICT+ smarter solutions

altran

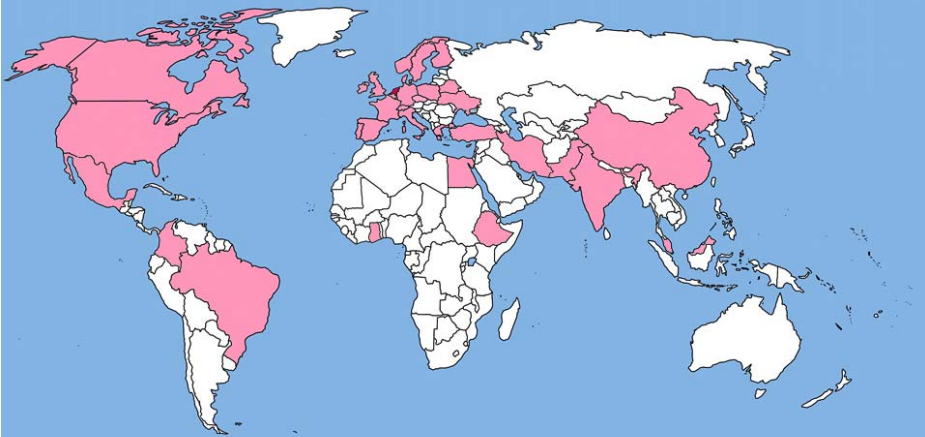
STOUX SOURCE OF YOUR TECHNOLOGY

CATENA

[medecs]

Technolution

ES International



A contact directory for ES International featuring 20 employee portraits, each with a name label. The names are: Twan Basten, Kees Goossens, Henk Corporaal, Gerard de Haan, Marc Geilen (with 'Mentor' in a red box), Jeroen Voeten, Jose Pineda de Gyvez, Sander Stuijk, Leo Rozwiak, Guido Dolmans, Bart Mesman, Dip Goswami, Hamid Pourshaghghi, Hailong Ji, Yifan He, Victor Sanchez, Majid Nabi, Jos Huisken, Martijn Koedam, and Marja de Mol. A large blue 'contact us' watermark is overlaid diagonally across the center. The 'Electronic Systems' logo is at the bottom left.