Automated Formalization and Management of Requirements for Cyber-Physical Systems
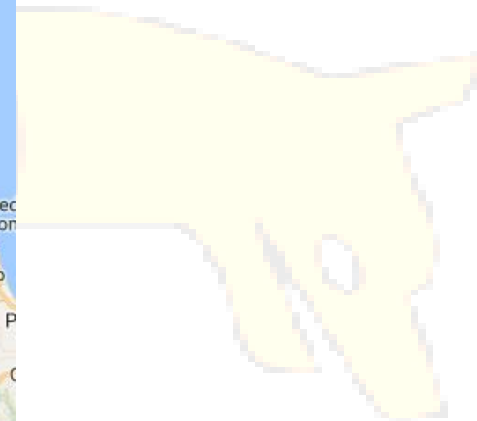
Simone Vuotto

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UNIVERSITÀ DEGLI STUDI DI SASSARI

CPS Summer School - Porto Conte Ricerche, Alghero - September 2017

Something about me...

Milan - I worked as a Software Engineer for an high-tech start-up

Brescia - Where I was born and raised

Genoa - I studied and graduated in Computer Engineering

Sophia Antipolis - I worked as a Software Engineer in the Travel Industry

Sassari – I'm working as researcher in the CERBERO project

Research Activity

- Requirements Management
  - Analysis and translation into a formal model
  - *Consistency* and *Satisfiability* checking to formally validate the correctness of requirements

- Modelling and Verification
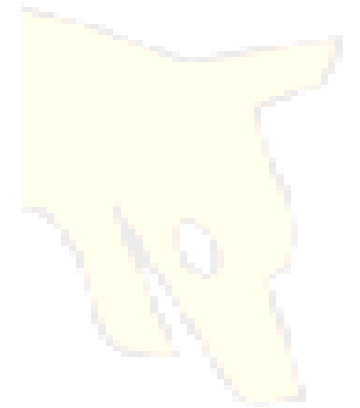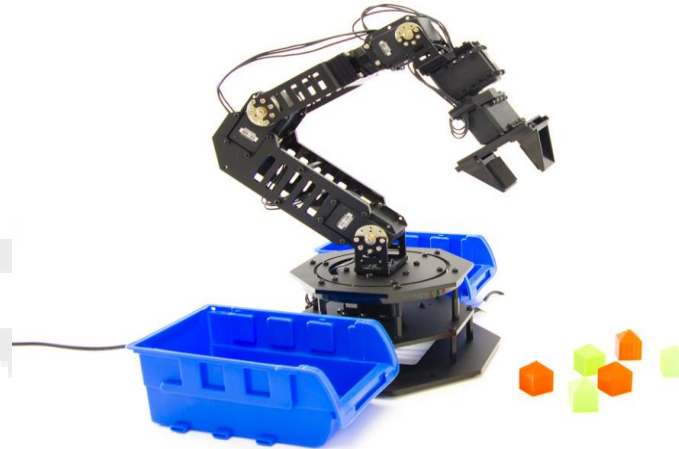 - Model *expressiveness* and *certification*

Research Activity

- Safe Control Policy

- Data Driven Verification

- Joint work with: A. Bit-Monnot, L. Pulina, A. Tacchella

Why am I here?

- To extend my knowledge about CPS

- To put CPS development in perspective

- To practice with the tools involved in CERBERO

- To have fun!