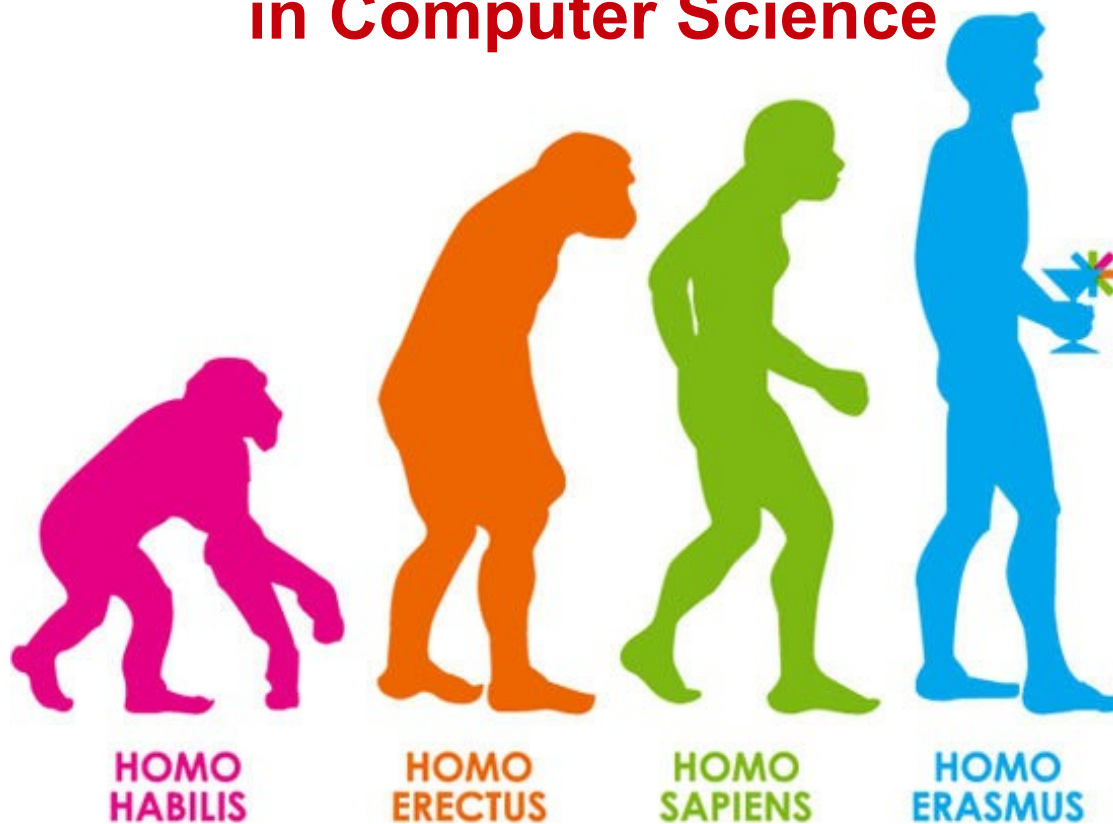


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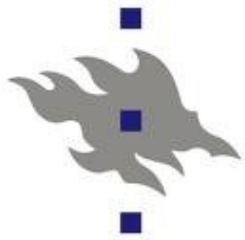
ERASMUS opportunities for U. HELSINKI students in Computer Science



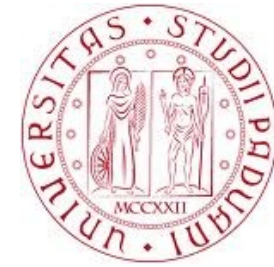
Education and Culture
Lifelong Learning Programme
ERASMUS

Mauro Conti
 Assistant Professor
 EU Marie Curie Fellow
 University of Padua
 conti@math.unipd.it



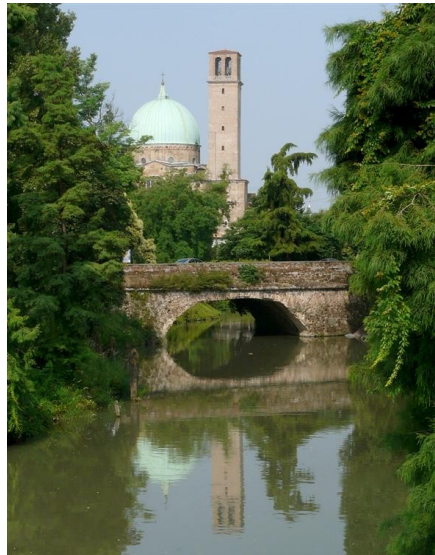


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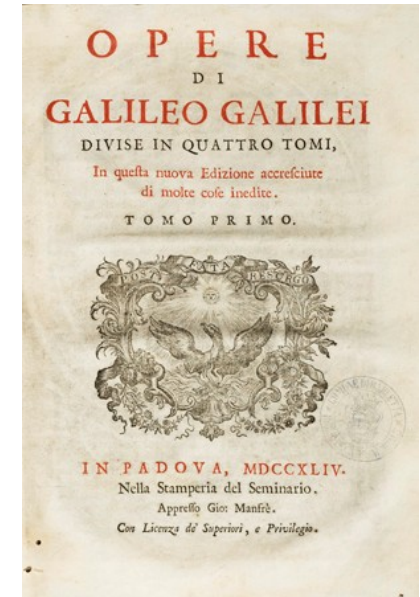
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Università di Padova “*Universa Universis Patavina Libertas*”



• University of Padua

- Founded in 1222
- Member of Coimbra group
 - 40 oldest and most prestigious in Europe
- First degree to a woman (1678)
- 2500 faculties / 65000 students
- School of Science:
 - Currently ranked 1st in Italy
 - Hosted: *Galileo Galilei*, *Nicolaus Copernicus*
(more recently): *Federico Faggin*, *Massimo Marchiori*



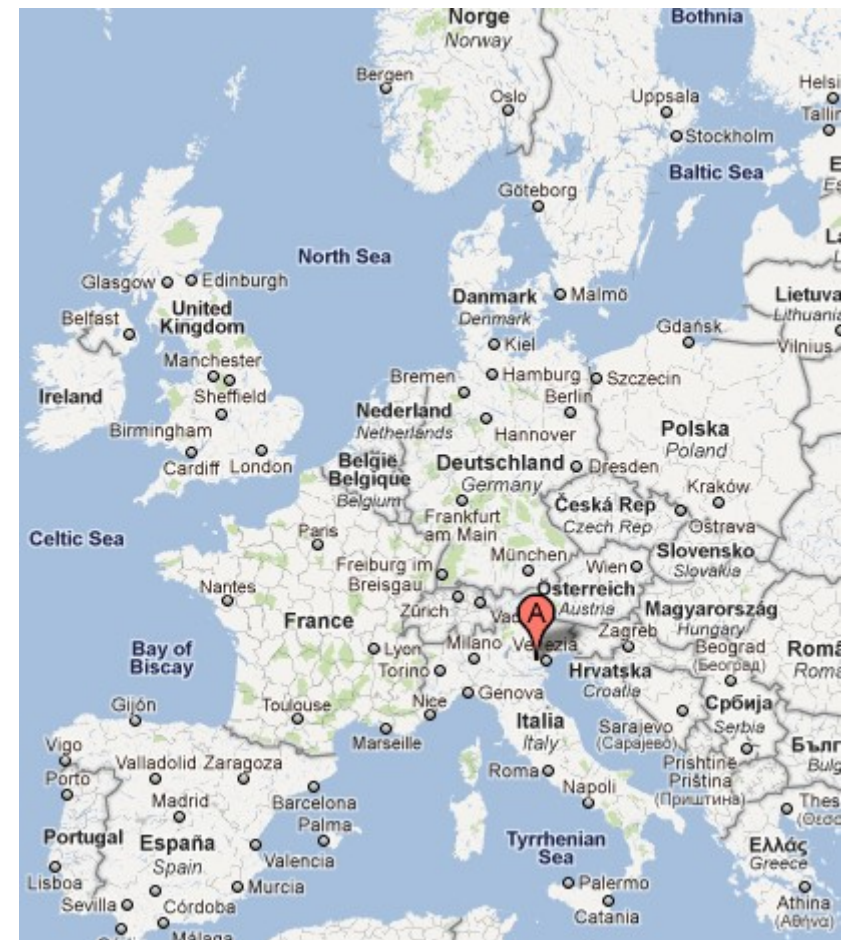
• City of Padua

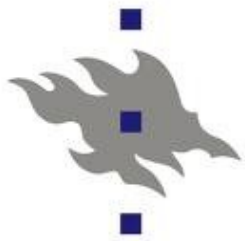
- Full of art and history!
- Quite small city (small distances)
- Good public transport
- Close to several research institutes, including:
 - U. of Venice, U. of Bologna, U of Trento, U. of Milan



Getting to Padua

- **Venice airport**
 - Regular flights to main EU hubs (from Alitalia, KLM, Lufthansa)
 - Less than 2h flights from main cities in Europe
 - The center of Padua is at some 40' (bus+train)
- At some 60' also Verona Airport and Treviso Airport
- Frequent daily trains to other cities in Italy





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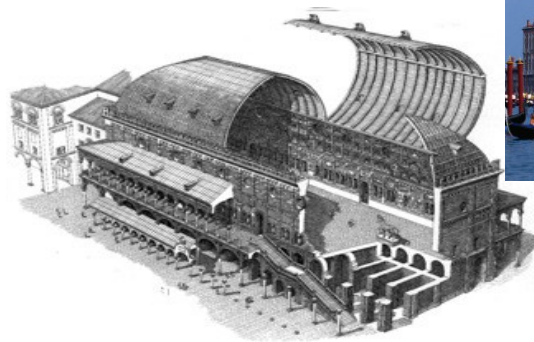
erasmus



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What you can see...

- “Palazzo Del Bo”
- The Scrovegni Chapel
- “Palazzo della Ragione” (XIII cent.)





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CS@UniPD - Education

ERASMUS for MSc (courses and thesis) PhD (research projects)

Academic Calendar

- I trimester: October and November
- II trimester: mid January to mid March
- III trimester: mid April to mid June

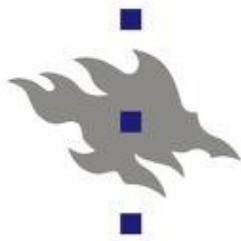


The following courses are always given in English:

- **Wireless Networks (I t.)** - www.math.unipd.it/~cpalazzi/retiwireless.html
- **Cryptography (I t.)** - www.math.unipd.it/~languasc/Teaching.html
- **Static Software Analysis (I t.)**
- **Bioinformatics (II t.)**
- **Computer and Network Security (III t.)** - <http://www.math.unipd.it/~conti/teaching.html>

Some other courses can be in English if participating internat. students

<http://informatica.math.unipd.it/laureamagistrale/corsimagistrale.html>



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CS@UniPD - Research

— Programming Languages

→ **Models and languages for concurrent, mobile and distributed systems: process calculi, graph rewriting systems, true concurrent semantics, behavioural equivalences**

Paolo BALDAN, Silvia CRAFA, Francesco RANZATO

→ **Static analysis and automatic verification techniques for software systems: abstract interpretation, partial order techniques, model based diagnosis, formal approaches to security.**

Paolo BALDAN, Livio COLUSSI, Silvia CRAFA, Gilberto FILE', Francesco RANZATO

— Artificial Intelligence

→ **Machine learning, pattern recognition, neural networks and kernel methods for structured data, bioinformatics, learning in games, data and business process mining, QSAR studies, time series prediction, information and document retrieval**

Fabio AIOLLI, Alessandro SPERDUTI

→ **Reasoning with preferences: knowledge representation, constraint satisfaction and optimization, preference modeling, elicitation and aggregation, multi-agent systems, computation social choice**

Francesca ROSSI

— Systems

→ **Development of concurrent, distributed and real-time systems; cloud computing and service orientation**

Tullio VARDANEGA

→ **Web technologies, social nets, semantic web and complex systems**

Massimo MARCHIORI

→ **Wireless networks, mobile applications, online games, multimedia on the Web, privacy and security**

Mauro CONTI, Ombretta GAGGI, Claudio Enrico PALAZZI



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Mauro Conti Very-short Bio



EUROPEAN COMMISSION
RESEARCH EXECUTIVE AGENCY



-  • PhD in Computer Science (2009) - Sapienza University of Rome, IT
-  • 2008 - Center for Secure Information Systems (CSIS) - George Mason University, USA
-  • 2009 - selected ERCIM "Alain Bensoussan" Fellowship (currently a EU Marie Curie action)
-  • 2009-2011 Postdoc at Vrije Universiteit Amsterdam, NL (with by Prof. A.S. Tanenbaum)
-  • Nov 2010, visiting researcher at UCLA - University of California, Los Angeles, USA
-  • from 2011, Assistant Professor at University of Padua, IT
-  • Jun/Jul 2012 visiting Assistant Professor at UCI - University of California Irvine, USA
-  • From 2012, EU Marie Curie Fellow

- Published 40+ papers in topmost international peer-reviewed journals and conferences
- Panelist at ACM CODASPY 2011
- General Chair for SecureComm 2012 and ACM SACMAT 2013

<http://www.math.unipd.it/~conti/>

Mauro Conti

Computer and Network Security

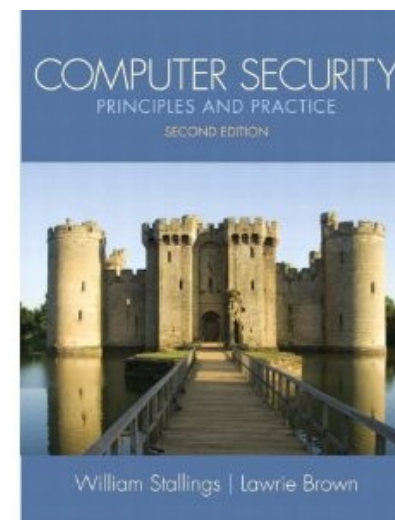
Topics

- **I part:** Computer Security Technology and Principles; Software Security and Trusted Systems; Management Issues; Cryptographic Algorithms; Network Security
- **II part:** Cutting Edge Research Issues; this part includes seminars given by international guests

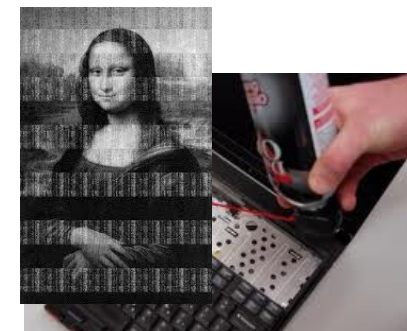


"The protection provided by encryption is based on the fact that most people would rather eat liver than do mathematics"

Bill Neugent



Possible MSc thesis in my research area...





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Mauro Conti Research Area

Security/privacy in: wired/wireless networks, smartphones, social networks, distributed systems, sensor networks, RFID, cloud computing, content centric networking, vehicular networks, location based services, ...

FakeBook: Detecting Fake Profiles in On-line Social Networks

Mauro Conti
University of Padua
Via Trieste, 63 - Padua, Italy
conti@math.unipd.it

Radha Poovendran
University of Washington
Seattle, WA 98195, USA
rp3@u.w.edu

Marco Secchiero
University of Padua
Via Trieste, 63 - Padua, Italy
marco.secchiero@studenti.unipd.it

NDN Interest Flooding Attacks and Countermeasures

Alberto Compagno*, Mauro Conti*, Paolo Gasti†, Gene Tsudik‡
 *University of Padua, Italy — acompagn@studenti.math.unipd.it
 †University of Padua, Italy — conti@math.unipd.it
 ‡New York Institute of Technology, USA — pgasti@nyit.edu
 §University of California, Irvine, USA — gts@uci.edu

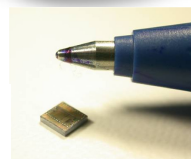
CRÊPE: A System for Enforcing Fine-Grained Context-Related Policies on Android

Mauro Conti, Member, IEEE, Bruno Crispo, Senior Member, IEEE, Earlene Fernandes, and Yury Zhauniarovich

Abstract—Current smartphone systems allow the user to use only marginally contextual information to specify the behavior of the applications: this hinders the wide adoption of this technology to its full potential. In this paper, we fill this gap by proposing CRÊPE, a fine-grained Context-Related Policy Enforcement

1426 IEEE TRANSACTIONS ON INFORMATION FORENSICS AND SECURITY, VOL. 7, NO. 5, OCTOBER 2012

particular, there is no experimental amount of resources (i.e., bandwidth, used hosts available to the adversary, ssfully perform IFA. and its countermeasures deserve an before NDN can be considered ready ment.



MOSES: Modes-of-use SEparation for Smartphones

Overview Publications Demo SourceCode People

Demo

MOSES: Modes-of-use SEparation for Smartphones

Enter a name of a Context

OFFICE Location

Complete Context-Related Policies

09:00:00

32 Innovations That Will Change Your Tomorrow

16 Your Body, Your Login

A team of Dutch and within answering a c almost impossible fo you'd come up with simple movements, computer. It could a Internet but keep f

Morning Routine Commute Work Play Health Home

Pitch +Z

Roll +Y

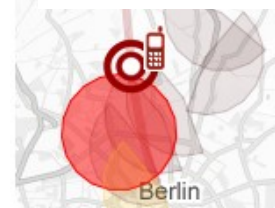
Yaw -X

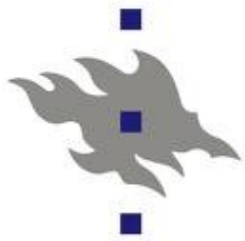
Roll -Z

Years away

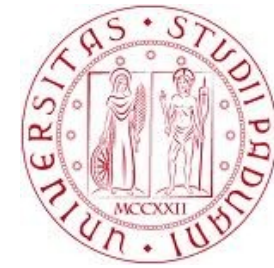
The New York Times

SMART TEETH



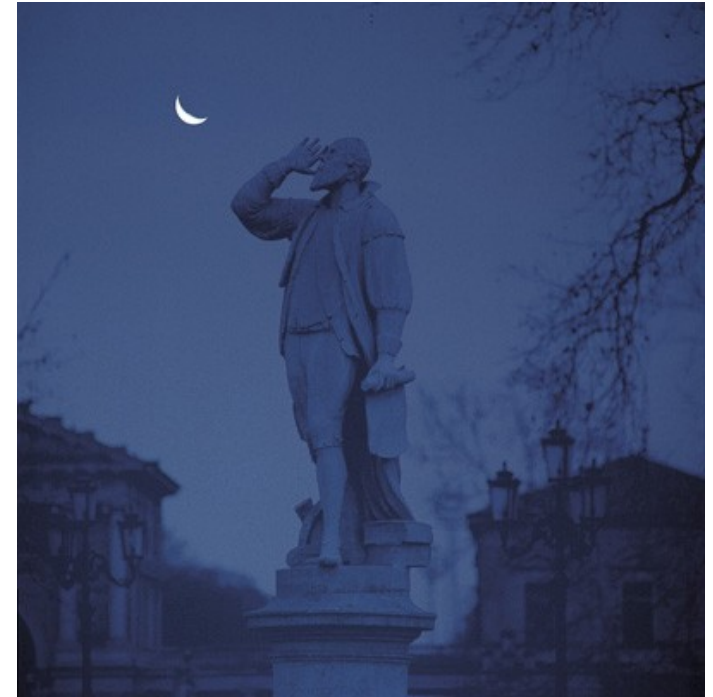


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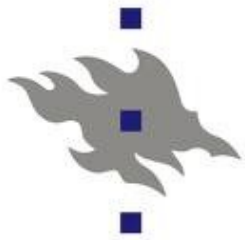
See you soon!



For further information:

Mauro Conti – University of Padua – conti@math.unipd.it

Mohamed Mosbah – Bordeaux1/LaBRI - mosbah@labri.fr

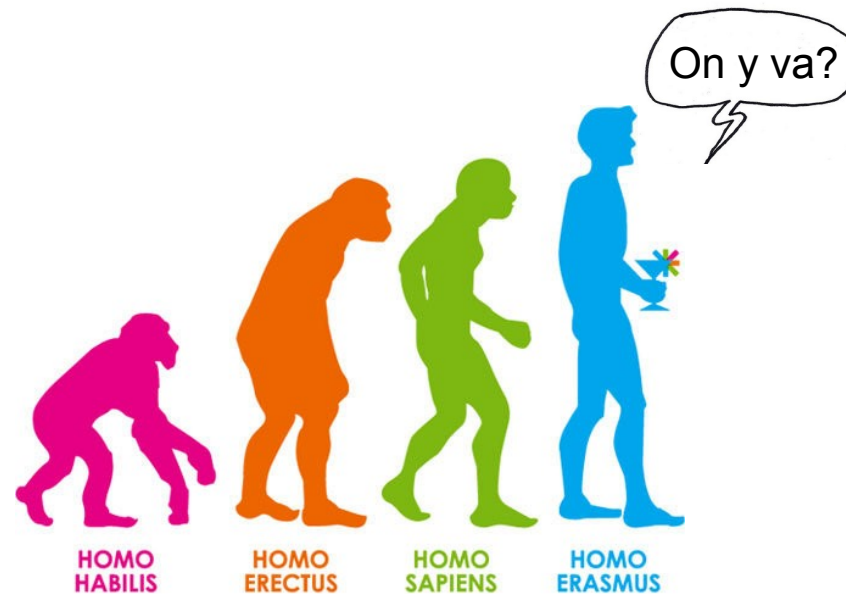


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Ready for take off?

