

CURRICULUM VITAE

Pier Francesco Cortese

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Personal Data

Place and Date of Birth Roma, 10/03/1977
Address: Via dei Georgofili 148 - 00147 ROMA (Italy)
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Studies

03/2007 PhD in Computer Science and Automation, “Roma Tre” University, Italy.
Thesis: “C-Planarity of Clustered Graphs: Methodologies, Algorithms, and Applications ”.
Advisor: prof. Giuseppe Di Battista.

7/2003 Qualification for the profession of Engineer, University of “Roma Tre”, Italy.

3/2003 Five years degree in Computer Science Engineering. University of “Roma 3”, Italy
Thesis: “Nuove metodologie per il test di planarità sui grafi”.
Advisor: prof. Giuseppe Di Battista.
Rating: 110/100 with honours

7/1995 General Certificate of Education, Liceo Scientifico Statale “F. Borromini”, Rome.
Rating: 60/60.

Current Position

Global Service Division at [Team Service S.C.a.r.l.](#)

Basic Skills

Operating Systems:

DOS, Windows 3.11, Windows 95/98/ME/NT/2000/XP/VISTA/Seven, Linux.

Applications:

Microsoft Office, Microsoft Visual Studio, Adobe Photoshop, Adobe Illustrator, Adobe Dreamweaver, SmartDraw, CorelDraw, CVS, SVN, LaTeX

Advanced Skills

Programming Languages and Libraries:

Pascal, C, C++, Visual C++, Java, JNI, JavaScript, VBScript, ASP, PHP, HTML, ML, CaML, Plasm, LEDA, GDTToolkit.

Development of C/C++ software libraries in Linux environment.

Protocols and network technologies:

ISO/OSI, Ethernet, TCP/IP, BGP, RTSP, HTTP,FTP, SMTP, POP3.
Development of web applications. Servers and domains management

Database: Entity-Relationship model, SQL, MySQL.

RFID: Standard ISO/IEC 18000, EPC Global standards, PUF-based tag (physically unclonable function)

CMS: Development of web application based on Plone/Zope

Languages

Good written and spoken English.

Research Projects

- **S.A.T.**, *Sistema Avanzato di Tracciabilità*. Advanced tracking system in intermodal freight transportation
- **GDToolkit**, *Graph Drawing Toolkit*

Past projects

- **MainStream**, *Algorithms for Massive Information Structures and Data Streams*
- **ALGO-NEXT**, *Algorithms for the Next Generation Internet and Web: Methodologies, Design and Applications*
- **DELIS**, *Dynamically Evolving, Large Scale Information Systems*
- **COSIN**, *COevolution and Self-organisation In dynamical Networks*

Publications

Journals

1. Pier Francesco Cortese, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, Maurizio Pizzonia. **C-Planarity of C-Connected Clustered Graphs**. *Journal of Graph Algorithms and Applications*. 12(2):225-262. Nov. 2008.
2. Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani, Maurizio Pizzonia. **On Embedding a Cycle in a Plane Graph**. *Discrete Mathematics*. 309(7):1856-1869. Apr 2009.
3. Pier Francesco Cortese, Giuseppe Di Battista, Antonello Moneta, Maurizio Patrignani, Maurizio Pizzonia. **Topographic Visualization of Prefix Propagation in the Internet**. *IEEE Transactions on Visualization and Computer Graphics*. 12(5):725-732. 2006.
4. Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani, Maurizio Pizzonia. **Clustering Cycles into Cycles of Clusters**. *Journal of Graph Algorithms and Applications*, Special Issue on the 2004 Symposium on Graph Drawing, GD '04. 9(3):391-413. 2005.

Conferences

1. Pier Francesco Cortese, Francesco Gemmiti, Bernardo Palazzi, Maurizio Pizzonia, Massimo Rimondini. **Efficient and Practical Authentication of PUF-based RFID Tags in Supply Chains**. In Proc. IEEE International Conference on RFID-Technology and Applications (RFID-TA 2010), 2010. *To appear*.
2. Patrizio Angelini, Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani, **“Topological Morphing of Planar Graphs”**. In 16th International Symposium on Graph Drawing (GD '08), volume 5417 of Lecture Notes Comput. Sci., pages 145-156, 2008.
3. Pier Francesco Cortese, Giuseppe Di Battista, Fabrizio Frati, Luca Grilli, Katharina Anna Lehmann, Giuseppe Liotta, Maurizio Patrignani, Ioannis Tollis, Francesco Trotta. **On the Topologies of Local Minimum Spanning Trees**. In Third Workshop on Combinatorial and Algorithmic Aspects of the Networks (CAAN '06), volume 4235 of Lecture Notes Comput. Sci., pages 31-44, 2006.
4. Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani, Maurizio Pizzonia. **On Embedding a Cycle in a Plane Graph**. In 13th International Symposium on Graph Drawing, volume 3843 of Lecture Notes Comput. Sci., pages 46-60, 2005.
5. Pier Francesco Cortese, Giuseppe Di Battista. **Clustered Planarity**. In Twenty-first annual symposium on Computational Geometry (proc. SoCG 05), ACM, pages 30-32, 2005.
6. Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani, Maurizio Pizzonia. **Clustering Cycles into Cycles of Clusters**. In 12th International Symposium on Graph Drawing (Proc. GD '04), volume 3383 of Lecture Notes Comput. Sci., pages 100-110, 2004.
7. John Michael Boyer, Pier Francesco Cortese, Maurizio Patrignani, Giuseppe Di Battista. **Stop Minding Your P's and Q's: Implementing a Fast and Simple DFS-based Planarity Testing and Embedding Algorithm**. In Graph Drawing (Proc. GD '03), volume 2912 of Lecture Notes Comput. Sci., pages 25-36, 2004.

Technical Reports

1. Pier Francesco Cortese, Francesco Gemmiti, Bernardo Palazzi, Maurizio Pizzonia, Massimo Rimondini. **Efficient and Practical Authentication of PUF-based RFID Tags**. Technical Report RT-DIA-150-2009, Dept. of Computer Science and Automation, Roma Tre University, 2009.
2. Patrizio Angelini, Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani. **Topological Morphing of Planar Graphs**. Technical Report RT-DIA-134-2008, Dept. of Computer Science and Automation, Roma Tre University, 2008
3. Pier Francesco Cortese, Giuseppe Di Battista, Fabrizio Frati, Luca Grilli, Katharina Anna Lehmann, Giuseppe Liotta, Maurizio Patrignani, Ioannis Tollis, Francesco Trotta. **On the Topologies of Local Minimum Spanning Trees**. Technical Report RT-001-06, Dip. Ingegneria Elettronica e dell'Informazione, Univ. Perugia, 2006.
4. Pier Francesco Cortese, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, Maurizio Pizzonia. **C-Planarity of C-Connected Clustered Graphs: Part I - Characterization**. Technical Report RT-DIA-109-2006, Dip. Informatica e Automazione, Univ. Roma Tre, 2006.
5. Pier Francesco Cortese, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, Maurizio Pizzonia. **C-Planarity of C-Connected Clustered Graphs: Part II - Testing and Embedding Algorithm**. Technical Report RT-DIA-110-2006, Dip. Informatica e Automazione, Univ. Roma Tre, 2006.
6. Pier Francesco Cortese, Giuseppe Di Battista, Antonello Moneta, Maurizio Patrignani, Maurizio Pizzonia. **Topographic Visualization of the Internet**. Technical Report RT-DIA-104-2005, Dip. Informatica e Automazione, Univ. Roma Tre, 2005.

7. Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani, Maurizio Pizzonia. **On Embedding a Cycle in a Plane Graph**. Technical Report RT-DIA-100-2005, Dip. Informatica e Automazione, Univ. Roma Tre, 2005.
8. Pier Francesco Cortese, Giuseppe Di Battista, Maurizio Patrignani, Maurizio Pizzonia. **Clustering Cycles into Cycles of Clusters**. Technical Report RT-DIA-91-2004, Dip. Informatica e Automazione, Univ. Roma Tre, 2004.
9. John Michael Boyer, Pier Francesco Cortese, Maurizio Patrignani, Giuseppe Di Battista. **Stop Minding Your P's and Q's: Implementing a Fast and Simple DFS-based Planarity Testing and Embedding Algorithm**. Technical Report RT-DIA-83-2003, Dip. Informatica e Automazione, Univ. Roma Tre, 2003.

Refereeing

- ACM SIGCOMM
- Software: Pratiche and Experience
- Journal of Graph Algorithms and Applications

- Graph Drawing 2008
- Graph Drawing 2007
- Graph Drawing 2006
- Graph Drawing 2005
- ICALP 2005
- WEA 2005
- Graph Drawing 2004
- Graph Drawing 2003

Teaching

- **4/2009**: "Didactics of Computer Networks", SSIS lazio
- **4/2008**: "Didactics of Computer Networks", SSIS lazio
- **From 10/2007 to 2/2008**: didactics support for the "Computer Networks I" course.
- **6/2007**: collaboration to the "C++ Language" course, organized by "Direzione Generale per il Personale Militare" and "Consiglio Nazionale delle Ricerche"
- **3/2007**: "Didactics of Computer Networks", SSIS lazio
- **3/2007**: "Computer Networks Lab", SSIS lazio
- **From 10/2005 to 2/2006**: didactics support for the "Computer Networks I", "Theoretical Computer Science I", and courses.
- **6/2006**: collaboration to the "C++ Language" course, organized by "Direzione Generale per il Personale Militare" and "Consiglio Nazionale delle Ricerche"
- **1/2006**: collaboration to the Computer Networks course for the second level Master Progettisti di Sistemi Informatici, organized by "Direzione Generale per il Personale Militare" and "Consiglio Nazionale delle Ricerche".
- **From 10/2005 to 2/2006**: didactics support for the "Computer Networks I", "Computer Networks II", "Theoretical Computer Science I", and "Theoretical Computer Science II" courses.
- **1/2005**: collaboration to the "C++ Language" course, organized by "Direzione Generale per il Personale Militare" and "Consiglio Nazionale delle Ricerche"
- **1/2006**: collaboration to the Computer Networks course for the second level Master "Progettisti di Sistemi Informatici", organized by "Direzione Generale per il Personale Militare" and "Consiglio Nazionale delle Ricerche".
- **10/2004**: didactics support for the "Computer Networks I", and "Theoretical Computer Science II" courses.

- **10/2003:** didactics support for the “Computer Networks I” course.
- **5/2000:** didactics support for the “Database” course.

Previous Occupations

- **From 10/2008 to 9 /2009:** Researcher at Data Management S.p.A.
- **From 3/2007 to 9/2008:** Postdoctoral researcher at Department of Computer Science and Automation, “Roma Tre” University.
- **10/2003:** Collaboration Agreement, Department of Computer Science and Automation, “Roma Tre” University. Occupation: didactics support for the “ Computer Networks I” course.
- **From 4/2003 to 10/2003:** Collaboration Agreement, Department of Computer Science and Automation, “Roma Tre” University. Occupation: realization of a graph drawing software library.
- **5/2000:** Collaboration Agreement, Department of Computer Science and Automation, “Roma Tre” University. Occupation: realization of didactics material for the “Databases” course.
- **From 3/2000 to 3/2003:** Students delegate within the Faculty of Engineering.

Other Activities

From 1999 voluntary assistant at "[Meeting per l'Amicizia tra i Popoli](#)" in Rimini.

Design of posters and handbills.

Personal Computer assemblage.