

**Cti**

Commission  
des titres d'ingénieur

**SIEGFRIED ROUVRAIS**

**CURRICULUM VITAE CTI**



## INFORMATIONS BASIQUES

Nom	Rouvrais
Prénom	Siegfried
Titre	M
Rôle actuel à la Cti	Expert
Nationalité	Française

### Courte biographie et motivations concernant la participation aux activités de la Cti

Siegfried Rouvrais has his research interests in the fields of software & system modeling and engineering education research & development. He is currently Research Scientist at Institut Mines-Télécom in France, Research Fellow at CNRS. Since 2003, at IMT Atlantique (formerly Telecom Bretagne), as program and curriculum designer, he is particularly involved in student's competency development, multi & trans-disciplinarity, and industry connections.

He actively participates in European projects related to quality assurance and quality enhancement in engineering education.

Siegfried is French representative at CDIO collaborator's meetings since 2010. He organized and chaired the CDIO international Fall meeting 2012 at Telecom Bretagne. He was elected in 2013 (MIT & Harvard meeting) to the board of international CDIO council members (6 at large), one year term.

### Mots-clés liés aux secteurs d'activité relevant de votre expérience

- Computer Engineering
- General Engineering – other forms include Engineering Physics and Engineering Science
- Software Engineering
- Autre : Engineering Education

## FORMATION ET COMPÉTENCES

### Mots-clés qui caractérisent votre expérience

- Activités internationales

### Diplômes

2008: Maître de Conférences qualification (tenured A/Prof) by the French National University (Computer Science, section 27)

2002: Ph. D. in Computer Science, University of Rennes, France & INRIA research Lab.

**Langue maternelle** Française

Langues étrangères		Je suis capable de lire des documents	Je peux écrire, lire et parler correctement	Je suis capable de conduire une mission dans cette langue
	Anglais			

### Utilisation de l'informatique

At least skilled as required by the 5 domains of the French C2i2MI (C2i niveau 2 "métiers de l'ingénieur"). IT tools used on a regular manner, professionally.

## EXPÉRIENCE PROFESSIONNELLE

### Situation actuelle

### Activité

#### Pour chaque poste occupé

Since 2002: Associate Professor in Software & System Engineering at IMT Atlantique (formerly Ecole Nationale Supérieure des Télécommunications, 1977): French selective Engineering Grande Ecole in ICT; member of the Software Engineering Group, Dept. of Computer Science; co-manager of the Transdisciplinary Research in Engineering Education Group (TREE)  
<http://recherche.imt-atlantique.fr/tree/>

2012-2018: Research Fellow in Computer Science, IRISA, UMR 6074 (i.e. French joint research CNRS unit, created in 1975). Dpt. 4: Language & Software Engineering, member of the Adaptive Software Systems team

2000-2001: Assistant Professor: ENSSAT, French graduate engineering School in Applied Science

1998-2000: Assistant Lecturer: ISTIC, University of Rennes, France

#### Recherche

Siegfried field of research covers non-functional properties (e.g., security, performance, dependability, scalability) and other quality attributes as drivers for software & enterprise architectures. Capacity Maturity Models (ISO 330xx and AFNOR IQLS) and also considered.

[2012-] PASS research team (CNRS IRISA).

[2011-2015] Automated Tool Chains for Service Creation and Simulation (Institut Mines-Télécom);

[2010-2012] Enterprise Architecture Principles for Telecommunications Services (Telecom Bretagne);

[2009-2011] Model Driven TOOL Interoperability (Telecom Bretagne);

[2008-2009] Vozone: framework architecture and modeling language for service providers, with British Telecom & CISCO. Task: verifying non-functional properties on design models (Telecom Bretagne);

[2006-2008] QSoftArch: early Quality analysis of distributed SOFTWARE ARCHitectural styles (Telecom Bretagne);

[2004-2009] CAMA: Components for Mobile Adaptable Architectures (Telecom Bretagne);

[2005-2008] SpontNet: a research program on SPONTaneous NETworks (Telecom Institute): component model for peer-to-peer overlays in a context-aware middleware for MANETs;

[2002-05] CADySIMo: Composition and Adaptability in Mobile Environments (ENST Bretagne);

[1998-2000] C3DS: a research project on Control and Coordination of Complex Distributed Services: 4th EU's Framework Program, long term European ESPRIT project (with INRIA);

[1995-2000] ASTER: Software Architectures for Distributed Systems (INRIA).

#### Enseignement

Siegfried is involved in a broad range of courses relating to computer science and software engineering both at B.Sc. and M.Sc. levels, as well as for adult professionals (e.g., Requirements, Software Architecture, Programming Languages, UML, Business Process Design and Modelling, Workflow, Enterprise Information Systems).

In connection with these theoretical and practical courses, I investigate problem- and project-based learning styles aiming at favoring students' autonomy with a focus on process and reflectivity (e.g., PBL, Dewey experiential learning, Mastery learning, self and formative assessment), including quality assurance and enhancement models.

Since 2003, as program and curriculum designer, he is particularly involved in student's competency development, multi & trans-disciplinarity, and industry connections;

[2011-12] IS Technical Architect A-Z educational program manager (6 months apprenticeship vocational training

program for adults);

[2007-2010] "UV-Metiers" co-manager : undergraduate and postgraduate sessions on personal development - educational, vocational guidance and careers counselling; accompanying and developing students' competencies through tutoring, training sessions, instruments for Human Resources (e.g. portfolio, assessment centre exercises, psychometric tests);

[Since 2003] largely engaged in program reforms and continuous improvements for introducing/aligning student Projects at Telecom Bretagne (In French);

[2003-09] LICIP: Collaborative Engineering and Pedagogical Innovations (Telecom Institute); CSCW for engineers (e.g. Web2.0, Forge, GanttTools);

[2007-09] co-coordinator of the M.Sc. Information Systems program ;

[2003-05] coordinator of the semester project "Engineering Complex Systems Project" at Telecom Bretagne;

[2004-09] course coordinator of "Views on Computer Science"; INF102-Moodle , see FIE 2011 paper

---

### **Gestion**

[from Sept. 2017 till August 2020] project coordinator of an Erasmus+ KA2 Strategic Partnership for Innovation, project coordinator: D'Ahoy (DecisionShip Ahoy!) - Decision Making Skills in VUCA contexts  
<http://www.imt-atlantique.fr/fr/decisionship-ahoy>

[since 2014] TREE Group manager: Transversal Research in Engineering Education  
<http://recherche.imt-atlantique.fr/tree/>

---

### **Évaluation et gestion qualité**

[since 2011] HEI Evaluation models for accreditation and quality assurance: an intl. perspective. Methods and Processes for Educational Programme Transformation: drivers, properties and criteria. Educational Program architecture modeling, renewal and merge processes, sustaining reforms.

[2014-2016] EU Erasmus+KA2 QAEMarketPlace4HEI project (Quality Enhancement to be supported by cross sparring processes)  
<http://projects.au.dk/cross-sparring/>

[2012] Sustainability audits in engineering education (pilot institution for EU Queste-SI LLP project)  
<https://plone.queste.eu/>

---

### **Autre expérience**

[from Nov. 2014 till June 2018] Erasmus Mundus Action2 INSPIRE (INternational Science Promoting Innovation and entREpreneurship);  
<https://www.inspiresouthafrica.eu/>

[2016] Visiting Academic in the Center for Research in Engineeringg and Science (CREE) at University of Cape Town, topic: South African engineering education program stuctures and extended programmes for specific groups, curricula transformation.

[2012] Full organizer of the 2012 CDIO intl. Fall meeting (112 participants, 19 countries);

[2002-05] INVOCOM: European project on "Internet-based Vocational Training: of Communication Students, Engineers, and Technicians"; LEONARDO European Commission's Lifelong Learning Program with Poland, Finland, Portugal and France;

---

### **Missions exclues pour raison déontologique**

## INFORMATIONS ADDITIONNELLES

### Informations additionnelles

Siegfried involvements in several European projects related to quality in engineering education, educational program transformations and continuous improvement, as well as his role in the international CDIO network for several years, allow him to carry out audits in English and in non francophone contexts.

Siegfried publication portfolio in engineering education is composed of around 50 papers (European Journal of Engineering Education, IEEE Frontiers in Education, CDIO , Questions de Pédagogies dans l'Enseignement Supérieur).

---

<b>Date d'actualisation</b>	22/03/2018
-----------------------------	------------

---