Florian PECUNE – November 19th, 1985

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Postdoctoral researcher
Artificial Intelligence

Professional Experiences

Feb. 17 - Present	**Postdoctoral Researcher** – LTI; Carnegie Mellon University, *Pittsburgh, USA* - Led the InMind project as a PI in collaboration with Yahoo! and other CMU labs. - Created an embodied personal assistant for mobile phones able to build a relationship with multiple users while achieving a recommendation task. <u>Supervisor:</u> Justine Cassell <u>PI Collaborators:</u> Tom Mitchell (Principal PI), Jeff Bigham, Alan Black, William Cohen, Maxine Eskenazi, Robert Frederking, Alexander Hauptmann, Brad Myers, Eric Nyberg
Oct 16 – Dec 16	**Postdoctoral Researcher** – ISIR; Université Pierre and Marie Curie, *Paris* - Designed and implemented an architecture allowing one user to interact with the embodied conversational agent Greta via PsychSim and Apache Thrift. - Implemented a visualization tool to display the updated mental state of the agent. <u>Supervisor:</u> Catherine Pelachaud
Nov 12 – Sep 16	**Ph.D student** – CNRS-LTCI; Telecom Paristech, *Paris* - Modeled the influence of dynamical social attitudes and theory of mind on an artificial companion's decision-making. - Implemented and evaluated the model via the embodied conversational agent Greta through a tutor/student scenario. <u>Supervisors:</u> Catherine Pelachaud and Magalie Ochs
Nov 14 – Jan 15	**Visiting Scholar** – Northeastern University, *Boston* - Modeled a social decision making process within PsychSim through a tutor/student scenario. <u>Supervisor:</u> Stacy Marsella
Oct 12	**Research Engineer** – Telecom Paristech, *Paris* - Designed and implemented a motor resonance architecture based on the facial recognition engine SHORE, the embodied conversational agent GRETA, and Apache Thrift.
March – July 12	**Research Intern** – Telecom Paristech, *Paris* - Modeled the influence of an agent's personality on its behavior - Implemented this model using the computational model FAtiMA and the embodied conversational agent Greta. <u>Supervisors:</u> Catherine Pelachaud and Magalie Ochs

Education

2012 – 16	**Ph.D in computer science** – Telecom Paristech <u>Jury:</u> Ms. Justine CASSELL – LTI, Carnegie Mellon University Mr. Pierre DE LOOR – LabSTICC, ENIB Mr. Jean-Louis DESSALLES – CNRS-LTCI, Telecom-Paristech Mr. Emiliano LORINI – IRIT, Université Toulouse 3 Paul Sabatier Mr. Nicolas SABOURET – LIMSI-CNRS, Université Paris Sud Ms. Magalie OCHS – LSIS, Université d'Aix-Marseille (*Thesis director*) Ms. Catherine PELACHAUD – LTCI, Telecom Paristech (*Thesis director*)
2011 – 12	**Master Degree in Engineering and Cognition** – Université Paris 8
2009 – 11	**Bachelor Degree in IT Management** – CFA AFTI, Orsay

Research Duties

2015 – 16	**Teaching Assistant** – Telecom Paristech, Paris (64h) - Java Programming *(undergraduate course)* - 20h - C++ Programming *(graduate course)* - 14h - PACT course *(undergraduate course)* - 32h Guiding one group of eight students in designing and developing a technical project
2016	**Lecture** – Université Technologique de Compiègne **-** Virtual Humans and Artificial Intelligence *(100 graduate students)* - 1h
2014 – 18	**Reviews** **-** Journal Papers – *ACM TOCHI, IEEE Pervasive Computing, IJHCS, Journal of Engineering* **-** Conference Papers – *ACII'15, IVA'15, IJCAI'16, IVA'17 Workshop CIHAI, AAMAS'17* - Program Committee – *IVA'16, '17, '18, CASA'18, AAMAS'18*
2015 – 18	**Students' supervision** - 15 undergraduate and 6 graduate students

Scientific publications

2018	**A User Simulator Architecture for Socially-Aware Conversational Agents** Alankar Jain, <u>Florian Pecune</u>, Yoichi Matsuyama, Justine Cassell *International Conference on Intelligent Virtual Agents (IVA'18)* **Field Trial Analysis of Socially-Aware Robot Assistant** <u>Florian Pecune</u>, Jingya Chen, Yoichi Matsuyama, Justine Cassell *International Conference on Autonomous Agents and Multiagent Systems (AAMAS'18)* **Socially-Conditioned Task Reasoning for a Virtual Tutoring Agent** Zian Zhao, Michael Madaio, <u>Florian Pecune</u>, Yoichi Matsuyama, Justine Cassell *International Conference on Autonomous Agents and Multiagent Systems (AAMAS'18)* **An embodied virtual agent platform for emotional Stroop effect experiments: A proof of concept** Ali Oker, Nadine Glas, <u>Florian Pecune</u>, Catherine Pelachaud *Biologically Inspired Cognitive Architecture (BICA)* **Faster Responses are Better Responses: Introducing Incrementality into Sociable Virtual Personal Assistants** Vivian Tsai, Timo Baumann, <u>Florian Pecune</u>, Justine Cassell *International Workshop on Spoken Dialog System Technology (IWSDS'18)*
2017	**Implementing and Evaluating a Laughing Virtual Character** Maurizio Mancini, Beatrice Biancardi, <u>Florian Pecune</u>, Giovanna Varni, Yu Ding, Catherine Pelachaud, Gualtiero Volpe, Antonio Camurri *Transactions on Internet Technology (TOIT)*
2016	**Affective Interaction with a Virtual Character through an fNIRS Brain-Computer Interface** Gabor Aranyi, <u>Florian Pecune</u>, Fred Charles, Catherine Pelachaud, Marc Cavazza *Frontiers in Computational Neuroscience* **Evaluating Social Attitudes of a Virtual Tutor** <u>Florian Pecune</u>, Angelo Cafaro, Magalie Ochs, and Catherine Pelachaud *International Conference on Intelligent Virtual Agents (IVA'16)*

SOCRATES: from SOCial Relations to ATtitude ExpressionS
Florian Pecune, Magalie Ochs, Stacy Marsella, Catherine Pelachaud
International Conference on Autonomous Agents and Multiagent Systems (AAMAS'16)

A computational model of social attitudes for virtual agents
Florian Pecune, Magalie Ochs, Stacy Marsella and Catherine Pelachaud
Workshop Affect, Compagnon Artificiel, Interaction (WACAI'16)

Emotion and Attitude Modeling for Non-player Characters
Brian Ravenet, Florian Pecune, Mathieu Chollet, Catherine Pelachaud
Emotion in Games - Theory and Praxis, K. Karpouzis and G. Yannakakis , Springer

2015

De l'intercompréhension à la complémentarité des relations sociales humain-machine
Florian Pecune, Magalie Ochs, Catherine Pelachaud
Intercompéhension de l'intraspécifique à l'interspécifique

ECA Control using a Single Affective User Dimension
Fred Charles, Florian Pecune, Gabor Aranyi, Catherine Pelachaud, Marc Cavazza
International Conference on Multimodal Interaction (ICMI'15)

Laughing with a Virtual Agent
Florian Pecune, Beatrice Biancardi, Yu Ding, Catherine Pelachaud, Maurizio Mancini, Giovana Varni, Gualtiero Volpe, Antonio Camurri
International Conference on Autonomous Agents and Multiagent Systems (AAMAS'15)

LOL - Laugh Out Loud
Florian Pecune, Beatrice Biancardi, Yu Ding, Catherine Pelachaud, Maurizio Mancini, Giovana Varni, Gualtiero Volpe, Antonio Camurri
International Conference on Artificial Intelligence (AAAI'15)

2014

Vers des Agents Conversationnels Animés Socio-affectifs
Magalie Ochs, Yu Ding, Nesrine Fourati, Mathieu Chollet, Brian Ravenet, Florian Pecune, Nadine Glas, Ken Prepin, Chloé Clavel, Catherine Pelachaud
Journal d'Interaction Personne-Système (JIPS)

Suggestions for Extending SAIBA with the VIB Platform
Florian Pecune, Angelo Cafaro, Mathieu Chollet, Pierre Philippe, Catherine Pelachaud
Workshop on Architectures and Standards for Intelligent Virtual Agents (WASIVA'14)

A Cognitive Model of Social Relations for Artificial Companions
Florian Pecune, Magalie Ochs, Catherine Pelachaud
International Conference on Intelligent Virtual Agents (IVA'14)

Modélisation de l'influence de la personnalité d'un compagnon artificiel sur ses attitudes sociales
Florian Pecune, Caroline Faur, Magalie Ochs, Celine Clavel, Catherine Pelachaud, Jean-Claude Martin
Workshop Affect, Compagnon Artificiel, Interaction (WACAI'14)

2013

A Formal Model of Social Relations for Artificial Companions
Florian Pecune, Magalie Ochs, Catherine Pelachaud
European Conference on Multi-Agent Systems (EUMAS'13)

Toward a Computational Model of Social Relations for Artificial Companions
Florian Pecune
(Doctoral Consortium) Affective Computing and Intelligent Interaction (ACII'13)

Vers des Agents Conversationnels Animés Socio-Affectifs
Magalie Ochs, Yu Ding, Nesrine Fourati, Mathieu Chollet, Brian Ravenet, <u>Florian Pecune</u>, Nadine Glas, Ken Prepin, Chloé Clavel, Catherine Pelachaud
Conférence francophone sur l'Interaction Homme-Machine (IHM'13)

De l'intercompréhension à la complémentarité des relations sociales humain-machine
<u>Florian Pecune</u>, Magalie Ochs, Catherine Pelachaud
Intercompéhension de l'Intraspécifique à l'Interspécifique (III'13)

2012   **Vers un modèle computationnel de l'influence de la personnalité d'un ACA sur son comportement**
<u>Florian Pecune</u>, Magalie Ochs, Catherine Pelachaud
Workshop Affect, Compagnon Artificiel, Interaction (WACAI'12)

Selected Talks and Demos

Sept 2018   **Socially Aware Conversational AI** (Invited talk)
CMU Information Systems Freshman Workshop – *Pittsburgh, USA*

July 2018   **Field Trial Analysis of Socially-Aware Robot Assistant**
Conference on Autonomous Agents and Multiagent Systems (AAMAS) – *Stockholm*

May 2018   **InMind Integrated Dialogue Architecture**
Yahoo! and CMU InMind summer retreat – *Sunnyvale, USA*

Dec 2017   **Towards Socially-Aware and Rapport-Building Agents**
Verizon and CMU InMind winter retreat – *Pittsburgh, USA*

Sep 2016   **Evaluating Social Attitudes of a Virtual Tutor**
Conference on Intelligent Virtual Agents (IVA) – *Los Angeles*

May 2016   **SOCRATES: from SOCial Relations to ATtitude ExpressionS**
Conference on Autonomous Agents and Multiagent Systems (AAMAS) – *Singapore*

Nov 2015   **Computational models of emotions used in human-agent interactions** (Invited talk)
Workshop on Theoretical and Empirical Approaches to Emotion Studies in Linguistics – *Paris*

Apr 2015   **Virtual Interactive Behavior: A modular architecture for ECA** (Invited talk)
Workshop on Affect, Artificial Companions, and Interactions – *Paris*

Jan 2015   **LOL - Laugh Out Loud**
Conference on Artificial Intelligence (AAAI) – *Austin, USA*

Sep 2013   **Toward a Computational Model of Social Relations for Artificial Companions**
Conference on Affective Computing and Intelligent Interaction (ACII) – *Geneva*

Skills

Programming   Java, Python, C/C++, HTML, PhP, SQL
Tools   Git, SVN, Eclipse, IntelliJ, Visual Studio, Office Software
Languages   French: mother tongue – English: fluent – German: beginner

Personal Interests

Reading   Science fiction, philosophy, comic books
Soccer   Played in a team for 9 years – Coached youth team (U13)