

# LUONG Tiffany

PhD Candidate

French, 25



tiffanydluong@gmail.com



+33 6 62 77 64 88



Rennes, France



linkedin.com/in/luong-tiffany



www.luongtiffany.com/



## PROFILE

---

I am a Ph.D. student working in both Inria Rennes (hybrid team) and the IRT b<>com (Human Factors Technologies team). My main topics of interest are Virtual Reality (VR), affective computing, human-computer interactions, and cognitive science. My thesis works mainly focus on mental workload recognition and exploitation for VR training.

## EDUCATION

---

- since* 01-2018 **Ph. D. in Computer Science– « Affective and Cognitive VR: Acquisition, Modelling, and Exploitation of Affective and Cognitive States in VR »**, [Université de Rennes 1, Rennes France](#)  
*Supervisors:* Anatole Lécuyer<sup>1</sup>, Ferran Argelaguet<sup>1</sup>, Guillaume Jégou<sup>2</sup>, Nicolas Martin<sup>2</sup>  
<sup>1</sup>*Inria, Rennes, France* ; <sup>2</sup>*IRT b<>com, Cesson-Sévigné, France*
- 
- 10-2016 **M.Sc. in Computer Science**, [Ecole nationale supérieure des Arts et Métiers, Laval, France](#)  
07-2017 Specialization in 3D interaction and VR/AR application design and research - *Ranked third*
- 
- 09-2014 **Engineering School**, [Ecole nationale supérieure des Arts et Métiers, Metz et Paris, France](#)  
07-2017 Engineering degree
- 
- 09-2012 **CPGE MPSI-PSI**, [Lycée Henri Poincaré, Nancy, France](#)  
07-2014 Intensive undergraduate 2-year mathematics and physics courses with engineering option to prepare for the nationwide competitive exams leading to French “Grandes Ecoles”

## EXPERIENCE

---

- 04-2017 **Inria, Rennes, France** [Internship \[6 months\]](#) + [Engineering \[12-2017 - 1 month\]](#)  
09-2017 “Low-Cost Full-Body Control of Human Avatars for Immersive Virtual Reality Systems”.  
Used technologies: Unity3D Mecanim, motion graphs VICON, FinalIK.  
*Supervisors:* Ludovic Hoyet, Anatole Lécuyer, Ferran Argelaguet (MimeTIC and hybrid teams)
- 
- 06-2016 **University of Birmingham, Birmingham, United Kingdom** [Internship \[4 months\]](#)  
09-2016 Literature review of laser process modelling, development of a model of the temperature diffusion into the bulk metallic glass (BMG) due to short laser pulses using MATLAB, and introduction of a theoretically-optimal processing strategy for temperature-controlled laser-polishing of BMG material.  
*Supervisors:* Jean-Michel Romano
- 
- 02-2015 **BASF Beauty Care, Pulnoy, France** [Internship \[1 month\]](#)  
Logistical & maintenance assistance: quality control, software updates, machines repair, welding, electronics assistance

# PUBLICATIONS & PATENT

---

## PEER-REVIEWED CONFERENCE PAPERS WITH ORAL COMMUNICATION

- [1] [T. Luong\\*](#), N. Martin\*, A. Raison, F. Argelaguet, J.-M. Diverrez, and A. Lécuyer, 'Towards Real-Time Recognition of Users' Mental Workload Using Integrated Physiological Sensors Into a VR HMD', in *19th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2020)*, Recife, Brazil (Nov. 2020).
- [2] [T. Luong](#), F. Argelaguet, N. Martin, and A. Lecuyer, 'Introducing Mental Workload Assessment for the Design of Virtual Reality Training Scenarios', in *2020 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)*, Atlanta, USA (Mar. 2020).
- [3] [T. Luong](#), N. Martin, F. Argelaguet, and A. Lécuyer, 'Studying the Mental Effort in Virtual Versus Real Environments', in *2019 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)*, Osaka, Japan (Mar. 2019)

## OTHER PUBLICATIONS

- [1] A. Audinot\*, D. Dewez\*, G. Fouché\*, R. Fribourg\*, T. Howard\*, F. Lécuyer\*, [T. Luong\\*](#), V. Mercado\*, A. Reuzeau\*, T. Rinnert\*, G. Vailland\*, and F. Argelaguet, '3Dexterity: Finding Your Place in a 3-Armed World', in *2020 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (IEEE VR)*, Atlanta, USA (Mar. 2020).
- [2] H. Brument\*, R. Fribourg\*, G. Gallagher\*, T. Howard\*, F. Lécuyer\*, [T. Luong\\*](#), V. Mercado\*, E. Peillard\*, X. de Tinguy\*, and M. Marchal, 'Pyramid Escape: Design of Novel Passive Haptics Interactions for an Immersive and Modular Scenario', in *2019 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)*, Osaka, Japan (Mar. 2019).
- [3] A. Bernardin\*, G. Cortes\*, R. Fribourg\*, [T. Luong\\*](#), F. Nouviale\*, and H. Si-Mohammed\*, 'Toward Intuitive 3D User Interfaces for Climbing, Flying and Stacking', in *2018 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)*, Reutlingen, Germany (Mar. 2018).

## PATENT

- [1] [T. Luong](#), F. Argelaguet, N. Martin, and A. Lécuyer. INPI Patent no FR2000704. Issued Jan. 24, 2020.

# AWARDED PROJECTS

---

- |         |  |
|---------|--|
| 03-2020 | <b>3DUI Contest Honorable Mention</b> , IEEE VR, Atlanta, US<br>Development of an application on the theme "Embodiment for the Difference"                           |
| 03-2019 | <b>3DUI Contest Tournament Winner</b> , IEEE VR, Osaka, Japan<br>Development of an escape room in VR involving passive haptics feedback and "Impossible Spaces"      |
| 03-2018 | <b>3DUI Contest Honorable Mention</b> , IEEE VR, Reutlingen, Germany<br>Development of 3D user interfaces for 3 given tasks (climbing, flying, tower stacking) in VR |
| 06-2017 | <b>Hackaton in VR First Prize</b> , Inria, Rennes<br>Development of a VR application featuring a movie   |
| 03-2017 | <b>Virtual Fantasy Limited Time Award</b> , Laval Virtual, Laval, France<br>Development of a VR application for education  |

## SKILLS

---

**VR/AR Development** (17 completed projects)  
Unity3D, C#

**Other Software, Libraries, and Languages**  
R, Python, Mocap (VICON), CATIA, MATLAB

**Computer working environment**  
Visual Studio, Visual Code, Git

**3D Modelling**  
3ds Max, Substance Painter, Photoshop

**Physiological Sensors**  
EDA, PPG, Eye-tracking

## LANGUAGES

---

**French** Native language

**English** Proficient

**German** Intermediate

## OTHER CERTIFICATIONS

---

PSC1 (Certificate of Training in **First Aid** – level 1)

**France Vice-Champion of Vietnamese Martial Arts** in 2011 (FFKDA AMV)

## HOBBIES/ACTIVITIES

---

**Music:** Piano (9 years of piano and music theory in conservatoire)

**Sport:** Vietnamese martial arts (6 years, teacher and coach), swimming (4 years)

**Art:** Drawing, 3D modelling, interest in cinema and video games

**Involvement** in numerous events and school associations during engineering school and PhD. Part of the organization team of an event welcoming over 1k people during engineering school.