

# Bruno Fruchard

PH.D. STUDENT

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## EDUCATION

### Bachelor in Computer Science

BACHELOR'S DEGREE

- General knowledge about Computer Science

*Université Paris-Sud, France*

*Sep. 2011 - Jun. 2013*

### Master of Science in Computer Science

MASTER'S DEGREE

- Courses focused on Human-Computer Interaction

*Université Paris-Sud, France*

*Sep. 2013 - Sep. 2015*

### Working on a Ph.D. Thesis

PH.D. THESIS

- *Interaction Techniques Exploiting Memory to Facilitate Access to Commands*

*Télécom ParisTech, France*

*Oct. 2015 - Dec. 2018*

## EXPERIENCE

### Development of a Multi-Scaled Realistic Librarian Chat Bot

ENGINEERING INTERNSHIP

- Engineering Internship made in the CPU team (CNRS) supervised by [Nicolas Sabouret](#)
- Implementation of a virtual agent with several realistic levels

*LIMSI, France*

*Apr. 2013 - Jul. 2013*

### Smarties: An Input System for Wall Display Development

ENGINEERING INTERNSHIP

- improvement of the [Smarties](#) software

*Université Paris-Sud, France*

*Apr. 2014 - Jul. 2014 (1 day a week)*

### Virtual Navigation on Wall-Displays

RESEARCH ASSISTANT INTERNSHIP

- Internship made in the ILDA team (INRIA) supervised by [Olivier Chapuis](#) and [Emmanuel Pietriga](#)
- Comparison of pan & zoom techniques on wall-sized displays

*Université Paris-Sud, France*

*Apr. 2015 - Sep. 2015*

## PUBLICATIONS

- [1] B. Fruchard, E. Lecolinet, and O. Chapuis. "How Memorizing Positions or Directions Affects Gesture Learning?" In: *ACM ISS'18: Interactive Surfaces and Spaces*. ACM, Nov. 2018.
- [2] Bruno Fruchard. "Interaction Techniques Exploiting Memory to Faciliate Command Activation". In: *29ème conférence francophone sur l'Interaction Homme-Machine*. Ed. by AFIHM. Rencontres doctorales. AFIHM. Poitiers, France, Aug. 2017. URL: <https://hal.archives-ouvertes.fr/hal-01577856>.
- [3] Bruno Fruchard, Eric Lecolinet, and Olivier Chapuis. "Démonstration de MarkPad : Augmentation du pavé tactile pour la sélection de commandes". In: *29ème conférence francophone sur l'Interaction Homme-Machine*. Ed. by AFIHM. AFIHM. Poitiers, France, Aug. 2017, 2 p. URL: <https://hal.archives-ouvertes.fr/hal-01577687>.
- [4] Bruno Fruchard, Eric Lecolinet, and Olivier Chapuis. "Impact of Semantic Aids on Command Memorization for On-body Interaction and Directional Gestures". In: *Proceedings of the 2018 International Conference on Advanced Visual Interfaces*. AVI '18. Castiglione della Pescaia, Grosseto, Italy: ACM, 2018, 14:1-14:9. ISBN: 978-1-4503-5616-9. DOI: [10.1145/3206505.3206524](https://doi.org/10.1145/3206505.3206524). URL: <http://doi.acm.org/10.1145/3206505.3206524>.
- [5] Bruno Fruchard, Eric Lecolinet, and Olivier Chapuis. "MarkPad: Augmenting Touchpads for Command Selection". In: *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*. CHI '17. Denver, Colorado, USA: ACM, 2017, pp. 5630-5642. ISBN: 978-1-4503-4655-9. DOI: [10.1145/3025453.3025486](https://doi.org/10.1145/3025453.3025486). URL: <http://doi.acm.org/10.1145/3025453.3025486>.
- [6] Bruno Fruchard, Eric Lecolinet, and Olivier Chapuis. "Mémoire de Commandes : Positions Spatiales versus Gestes Directionnels". In: *30ème conférence francophone sur l'Interaction Homme-Machine*. Ed. by AFIHM. AFIHM. Brest, France: ACM, Oct. 2018, 6 p.

## SUPERVISION

### Longitudinal Study on the MarkPad Software

YANIS MENDI - FIRST YEAR MASTER'S STUDENT IN COGNITIVE ERGONOMICS

- Supervised by Stéphane Safin 80%, **Bruno Fruchard 20%**
- Study on the MarkPad prototype to evaluate its appropriation by the users

*Télécom ParisTech, France*

*Jan. - Jun. 2018*

## VOLUNTEERING

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### Journée Interaction Homme-Machine et Intelligence Artificielle

STUDENT VOLUNTEER

UPMC, France  
Mar. 17, 2017

- Helping for the organization of this event.

### ACM CHI 2017

STUDENT VOLUNTEER

Denver, CO, USA  
May 6-11, 2017

- 20 hours spent to help organizing the event

### UEIS 2017

STUDENT VOLUNTEER

UPMC, France  
Oct. 31, 2017

- Helping the organization of this event.

### Reviewer for international conferences

FULL PAPER CHI'18, WORK IN PROGRESS TEI'18

### Reviewer for national conferences

FULL PAPER IHM'18

### Reviewer for journals

FULL PAPER IJHCS 2018

## TEACHING

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### IGR201: Développement d'apps interactives 2D, 3D, Mobile et Web

TEACHING ASSISTANT

Télécom ParisTech, France  
2015-2017

- Development of interactive applications in different contexts
- Languages used: C++, Java, JavaScript

### INF224: Paradigmes de programmation

TEACHING ASSISTANT

Télécom ParisTech, France  
2015-2018

- Object-Oriented Programming in C++

### INF723: Java et Génie Logiciel

TEACHING ASSISTANT

Télécom ParisTech, France  
2015-2016

- Java programming

### IGR203: Interaction Homme-Machine

TEACHING ASSISTANT

Télécom ParisTech, France  
2016-2018

- Human Computer-Interaction theory and programming

### INF224: Paradigmes de programmation

TEACHING ASSISTANT

Télécom ParisTech, France  
2016-2018

- Object-Oriented Programming in C++

### IGR204: Visualization

TEACHING ASSISTANT

Télécom ParisTech, France  
2016-2018

- Visualization theory and programming
- Tools used: D3 and Processing

### SLR207: Infrastructures et plateformes pour l'informatique répartie

TEACHING ASSISTANT

Télécom ParisTech, France  
2016-2017

- Distributed computing programming in Java

### INF727: Systèmes Répartis pour le Big Data

TEACHING ASSISTANT

Télécom ParisTech, France  
2017-2018

- Distributed computing programming in Java

## SCIENTIFIC MANIFESTATIONS

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### "Qu'est-ce qu'un chercheur en IHM ?"

TALK

Télécom ParisTech, France  
Oct. 28, 2016

- Presentation of HCI research to highschool students

## **”Qu’est-ce qu’un chercheur en IHM ?”**

TALK

- Presentation of HCI research to highschool students

*Télécom ParisTech, France*  
Oct. 27, 2017