

# Cedric Honnet

[contact@honnet.eu](mailto:contact@honnet.eu) // [www.honnet.eu](http://www.honnet.eu)

## ABSTRACT

With endless enthusiasm about interactivity, new media and the arts, I love to explore innovative technologies... I am profoundly curious and always open for collaborations.

## Keywords

Interhacktivity, Arts, Robotics and Embedded Systems.

---

## ACADEMIC

### Publications

Papers available online: [honnet.eu/#Academic](http://honnet.eu/#Academic)

- CHI 2018: *IN-TOUCH: To improve haptic experiences in VR and AR, we must first improve tracking* - Paul Strohmeier, Cedric Honnet
- AH 2018: *HIVE Tracker: a tiny, low-cost, and scalable device for sub-millimetric 3D positioning* - Dario R. Quinones, Goncalo Lopes, Danbee Kim, Cedric Honnet, David Moratal, Adam Kampf
- TEI 2018: *Designing eTextiles for the Body: Shape, Volume and Motion* - Rachel Freire, Paul Strohmeier, Cedric Honnet, Jarrod Knibbe, Sophia Brueckner
- NIME 2017: *Designing a Multi-Touch eTextile for Music Performances* - Maurin Donneaud, Cedric Honnet, Paul Strohmeier
- MOCO 2017: *Digital Oxymorons: From ordinary to expressive objects using tiny wireless IMUs* - Andreas Schlegel, Cedric Honnet
- TEI 2017: *Second Skin: An Exploration of eTextile Stretch Circuits on the Body* - Rachel Freire, Cedric Honnet, Paul Strohmeier
- LM 2016: *Developing an Ecosystem for Interactive Electronic Implants* - Paul Strohmeier, Cedric Honnet, Samppa Von Cyborg
- MOCO 2016: *Movement of Things: Exploring Inertial Motion Sensing When Autonomous, Tiny and Wireless* - Andreas Schlegel, Cedric Honnet

### Reviewing

- CHI: Conference on Human Factors in Computing Systems
- TEI: Tangible Embedded & Embodied Conference
- NIME: New Interfaces for Musical Expression
- AH: Augmented Human Conference

### Teaching / Training / Mentoring

**What?** IoT, Wearables, Electronics, Interaction, Music Tech...

**Where?** Engineering Schools, Digital Art Labs, Incubators...

---

## EXPERIENCE

### 2017-20XX: Sorbonne University / CNRS, Paris

*HCI Research Engineer - Embedded systems*

Situated Analysis of Human-Machine Interactions in Smart Environments: 3D positioning (HiveTracker) and smart mobile video-projection for headset-less Mixed Reality

### 2016-20XX: Carpe Noctem, International

*Research Engineer, Trainer, Mentor*

- Consulting about embedded systems, wearables, IOT and manufacturing in China, France, California
- Visiting Researcher at various institutions in Denmark, Singapore, etc. (see Publications section)
- Teaching in engineering schools, hackerspaces, incubators...

### 2014-2016: Tangible Display, USA / France / China

*Co-founder - Research & Development Engineer*

- Designed (hardware+software) various interactive systems with RFID, touch screens or motion sensors such as the "Twiz" (Tiny Wireless IMU): a Bluetooth Low Energy powered 9 degree of freedom motion sensor.
- Tech+Art experimentations such as the BAD project (Body Air Drum / TapMe), a wearable musical controller or the SonArt project, an interactive system offering information and security for the Art Decoratifs museum.

### 2012-2013: Sifteo, USA

*Embedded Systems Engineer & InterHacktivist*

- Worked on various elements of the firmware and software: user interface (sound, graphics...), battery management, simulator, graphics controller, bootloader reliability, etc.
- Experimental interactive projects: Implemented a gestures recognition system using the MIT-GRT Toolkit, added a MIDI interface to control music software, and developed an audio communication system to send data to smartphones.

### 2010-2011: Sigma Designs - USA

*Research & Development Engineer, Trainee*

- Google's VP8 Video Decoder Porting on Custom Processor:
- Firmware improvement for optimizing memory management and accelerating execution
- Hardware instruction customization for specific purposes such as arithmetic decoding or binary tree decoding

### 2008: Telecom ParisTech EE Research Labs - France

*Research & Development Engineer, Trainee*

Evaluation of combinatorial components reliability using FPGA for massively parallel simulation of fault injection.

### 2007: Brunel University EE Research Labs - UK

*Research & Development Engineer, Trainee*

Signal Restoration experimentations & Universal Software Radio Peripheral modules implementations.

---

## EDUCATION

### 2008-2011: Telecom ParisTech, France

*Master of Engineering (Diplome d'ingenieur) - with honors*  
Computer Sciences: Embedded Systems & Robotics, Digital Media, Systems On Chip, Security  
Extracurricular: Telecom Robotics, Savate (French boxing)

### 2004-2008: University Pierre & Marie Curie, France

*Master of Science 1 (Maitrise) - with honors*  
EECS with emphasis on Digital Electronics  
Extracurricular: computer science tutoring for disabled students, Jujitsu, Sambo

### 2006-2007: Brunel University, UK

*Bachelor of Engineering (Licence) - with honors*  
EECS with emphasis on Digital Signal Processing  
Extracurricular: Judo, Thai Boxing

---

## LANGUAGES

- French: ILR Level 5 - Native proficiency
  - English: ILR Level 4 - Full professional proficiency
  - Spanish: ILR Level 3 - Professional working proficiency
- 

## DISTINCTIONS, AWARDS...

- 2018: Human-Computer Interface Prize by Hack-A-Day
- 2016: Mentor in art+tech accelerator (MaDlab Manchester)
- 2015: Google Soli alpha developer program
- 2014: 1st place at Bemyapp factory hackathon, SF, CA
- 2009: Besse Foundation Fellow (till 2011)
- 2005: Kenpoken France champion - 80 Kg category
- 1997: DMC DJ championship (Fr): 8th final - 2nd youngest

---

## EXTRA

### Collectives

- DataPaulette ([DataPaulette.org](http://DataPaulette.org)): wearable / textile hackerspace - core member
- Noisebridge ([Noisebridge.org](http://Noisebridge.org)): hackerspace - electronics and tinkering teachings
- Cumbia Rockers Allstars and Kombo Clan Destino ([GatosNegrosProd.com](http://GatosNegrosProd.com)): DJ in Cumbia-Fusion groups
- Telecom Robotics ([telecom-robotics.org](http://telecom-robotics.org)): Robotic competition society

### Art / Science Residencies

- Singapore 2016: Media Lab Lasalle - visiting researcher: see [Digital Oxymorons](http://DigitalOxymorons) publication.
  - Denmark 2015: Copenhagen University, Human-Centred Computing - visiting researcher: [body-ui.eu](http://body-ui.eu)
  - France 2015: Fructus Animalis - art against programmed obsolescence : [project.honnet.eu/fructus-animalis](http://project.honnet.eu/fructus-animalis)
  - Singapore 2014: Growell - explored wild animals camera-trap, DIY farm robotics...
  - Colombia 2012: Plataforma - [project.honnet.eu/Resbala](http://project.honnet.eu/Resbala) // [project.honnet.eu/Fusion](http://project.honnet.eu/Fusion)
- 

## REFERENCES

- David Merrill (Sifteo): [dMerrill\(a\)media.mit.edu](mailto:dMerrill(a)media.mit.edu)
- Ali Rizvi (Sigma Designs): [aRizvi\(a\)apple.com](mailto:aRizvi(a)apple.com)
- Alexis Polti: [Alexis.Polti\(a\)TelecomParisTech.fr](mailto:Alexis.Polti(a)TelecomParisTech.fr)
- Saeed Vaseghi: [Saeed.Vaseghi\(a\)Brunel.ac.uk](mailto:Saeed.Vaseghi(a)Brunel.ac.uk)