Cedric Honnet

contact@honnet.eu **//** 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

HCI, Embedded Systems, Interhacktivity, Arts, Robotics, IoT, 3d [Position | Motion | Touch] Sensing, Manufacturing, [Ultra] Low Power, Wearables, eTextiles, etc.

RESEARCH

Publications

Papers available online: honnet.eu/#Academic

- UbiComp 2019: *HiveTracker: 3d Positioning for Ubiquitous Embedded Systems* - C. Honnet, G. Lopes

- TEI 2019: *Optimizing Pressure Matrices: Interdigitation and Interpolation Methods for Continuous Position Input* - P. Strohmeier, V. Hakansson, C. Honnet, D. Ashbrook, K. Hornbaek

- CHI 2018: *IN-TOUCH: To improve haptic experiences in VR and AR, we must first improve tracking* - P. Strohmeier, C. Honnet

- AH 2018: *HIVE Tracker: a tiny, low-cost, and scalable device for sub-millimetric 3D positioning* - D. Quinones, G. Lopes, D. Kim, C. Honnet, D. Moratal, A. Kampf

- TEI 2018: *Designing eTextiles for the Body: Shape, Volume and Motion* - R. Freire, P. Strohmeier, C. Honnet, J. Knibbe, S. Brueckner

- NIME 2017: *Designing a Multi-Touch eTextile for Music Performances* - M. Donneaud, C. Honnet, P. Strohmeier

- MOCO 2017: *Digital Oxymorons: From ordinary to expressive objects using tiny wireless IMUs* - A. Schlegel, C. Honnet

- TEI 2017: *Second Skin: An Exploration of eTextile Stretch Circuits on the Body* - R. Freire, C. Honnet, P. Strohmeier

- LM 2016: *Developing an Ecosystem for Interactive Electronic Implants* - P. Strohmeier, C. Honnet, Samppa Von Cyborg

Reviewing

- UIST: User Interface Systems and Technologies
- CHI: Human Factors in Computing Systems
- TEI: Tangible Embedded & Embodied
- NIME: New Interfaces for Musical Expression
- AH: Augmented Human Conference

EXPERIENCE

2017-20xx: NeuroGEARS, London

Research Engineer - Embedded systems
3D positioning: HiveTracker.github.io

2017-20xx: Sorbonne University / CNRS, Paris

Research Associate - Embedded systems
"Situated Analysis of HCIs in Smart Environments."

2016-2017: Carpe Noctem, International

Research Engineer, Trainer, Mentor
- Consulting about embedded systems, wearables, IOT and manufacturing in China, France, California
- Visiting Researcher in UK, Denmark, Singapore, Portugal (see Publications and Logs: honnet.eu/#Logs)
- Teaching in engineering schools, hackerspaces, incubators...

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

Co-founder - Research & Development Engineer
-Designed interactive systems (hardware+software) with RFID, touch screens or motion sensors such as the "Twiz": a BLE motion sensor with embedded 9 DoF fusion.
-Tech+Art experimentations such as TapMe, a wearable musical controller or the SonArt project, an information (and security) interactive system 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: memory management and execution acceleration
- 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

★ 1st French Engineering school (Pro. ranking)
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: Sorbonne University (ex-UPMC), France

★ 1st French university (Academic ranking)
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: Kenpokan France champion - 80 Kg category
- 1997: DMC DJ championship (Fr): 8th final - 2nd youngest

EXTRA

Teaching / Training / Mentoring

- *What?* IoT, Wearables, Interaction, Music Tech...
- *Where?* Engineering Schools, Tech-Art Labs, Incubators...

Collectives

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

Art / Science Residencies

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

REFERENCES

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