Alexis BRENON

Applied researcher

- December 20th, 1991 (26 y. old)
- +33 (0)6.74.43.25.21
- brenon.alexis@gmail.com
- alexisbrenon.github.io

About

My name is **Alexis BRENON**. I am **26 years old** and I recently defended my thesis about **deep model for adaptive decision-making in smart-home**. I am seeking for a position as an **applied researcher** to develop new technologies based on **machine learning** and bring them to the mainstream market.

Skills

Languages

- 📖 French: mother tongue
- 🇬🇧 English: professional efficiency

Hard skills

ASM Assembly	5 HTML/CSS/JS
Bash	Java
C/C++	LaTeX Latex
Docker	Lua Lua
Git	Python

Soft skills

Collaborative	Persevering
Inventive	Rigorous

Career

2017	PhD in computer sciences	Université Grenoble Alpes
2014	M.Sc (2nd y.) in software engineering with honors	Université Joseph Fourier
	Sandwich course as software engineer	STMicroelectronics
2013	M.Sc (1st y.) in computer sciences	Aix-Marseille Université
	Software engineer intern	Wyplay
2012	B.Sc in computer sciences with honors	Université Claude Bernard
	Software developer intern	Dipiom Media
2009	Scientific A level with honors	Lycée Rosa Parks (69)

Publications

Open-access on cv.archives-ouvertes.fr/alexisbrenon

Alexis Brenon (2017). Modèle profond pour le contrôle vocal adaptatif d'un habitat intelligent.

Alexis Brenon et al. (2016). Preliminary Study of Adaptive Decision-Making System for Vocal Command in Smart Home.

Alexis Brenon et al. (2016). Étude préliminaire d'une méthode de prise de décision adaptative pour la commande vocale dans un habitat intelligent.

Alexis Brenon et al. (2015). Using Statistico-Relational Model for Activity Recognition in Smart Home.

Achievements

ARCADES

The *Adaptive Reinforced Context-Aware Deep Decision System* is an adaptive decision-making system for smart-homes.

- Unified representation of heterogeneous sensors
- Deep learning (Torch) for feature extraction
- Long life learning through reinforcement learning

brenona.gricad-pages.univ-grenoble-alpes.fr/arcades

M. Michel VACHER (Univ. Grenoble Alpes) — +33 (0)4.57.42.14.38

StreamRecord

Recording and segmentation of audio stream on Linux (available with `pip`).

- Multi-threading
- Linux components understanding (PulseAudio, X11, DBus)

github.com/AlexisBRENON/deezer_record

TraceDecoder

Embedded systems execution traces analyzer improvement

- Collaboration with Canadian, English and Moroccan teams
- Binary data analyze and database storing

M. Serge DePAOLI (STMicroelectronics) — +33 (0)4.76.92.56.20

PiPy MIPS port

Port Python interpreter with Just In Time compiler for MIPS architecture.

- Transliteration of the Python syntax to MIPS assembly code

M. Aurèle TRAYNARD (WyPlay) — +33 (0)4.91.45.71.80

🏠 Open-source contributions

Contributions to open-source projects as Chromium or AwesomeWM.
github.com/AlexisBRENON/
www.chromium.org/Home

🏠 Self-hosted personal server

Debian based server: multimedia (Kodi), cloud (OwnCloud), raspberry pi (Boblight), etc.
- System administration : access, shares, file systems (RAID)
- Docker based services encapsulation

💼 Open-source multimedia player

Development of a non-technical multimedia player based on open-source components.
- Find and compare existing solutions
- Demonstrations and usability tests
- Plugins development to fulfill user expectations

M. Éric BOISSEAU — +33 (0)9.72.22.88.52

🎓 Life-game (cellular automaton)

Pair working for the development of a cellular automaton graphical application.
- Object oriented design and development
- AWT graphical user interface and web applet

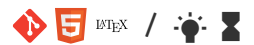github.com/AlexisBRENON/life-game-lif13

🎓 Stellody

Pair working for the development of an audio player with 3D display.
- GTK+ user interface with Mac and Linux compatibility
- Signal processing for musical analysis

github.com/AlexisBRENON/stellody

🏠 Vinyl

Beamer Latex like web framework for scientific posters and talks.
- Automatic layout with flexbox
- Bibliography (bibtex, bibjson) parsing and rendering

github.com/AlexisBRENON/Vinyl

🏠 Hyperion2Boblight

Server-client application available through `pip` for Boblight based AmbiLight like systems.
- Communication protocol retro-engineering
- Packaging and distribution on a widely used platform

github.com/AlexisBRENON/hyperion2boblight