
*Proficient Python developer, passionate & open-source minded.
I love devising creative solutions to challenging problems
and getting my hands dirty to make them real.
Learning and raising standards are an ongoing obsession.*

Experience

MeilleursAgents.com

2009 – now

Senior Software Engineer / Data Team manager

(5 years)

- Designed, with in-house economists, tools and algorithms for **continuous analysis of real-estate market** in France, combining various sources of not-so-structured data and feeding the whole business with fresh and worked information. Some financial institutions and authorities expressed their deep interest for this kind of expertise.
- Broaden an application in Python/Numpy/Scipy that computed, every month, the estimated square-meter price of every building and house in Paris and around. This was the first known **live implementation of the repeat-sales economic model**. Results were displayed as a heat-map on the website homepage for everyone to refer to easily.
- Led the construction of a **large-scale data acquisition infrastructure** (hundred of millions of documents) based on asynchronous web crawlers, Redis as a persistent job queue broker and replicated MongoDB servers. Inspired the forthcoming infrastructure update targeting a billion documents, using RabbitMQ along with a Riak cluster and leveraging lessons learned from day-to-day operations.
- Built a system for **automatic geospatial annotation of text documents**, involving operations like toponym detection with Sphinx, a full-text search engine, false-positives filtering based on geographical coherence and custom triangulation from landmark geometries.

Keirn.fr

2007 – 2009

Self-employed

(2 years)

- Set up my own company as a micro-ISV business, focused on the development and selling of a **web-based video-conferencing service**, for on-line banks and insurance companies that struggled to meet their customers otherwise.
- Ended up doing more consulting than product development and eventually dropped the latter completely. **Consulting work** ranged from basic web sites to a multi-process application processing gigabytes of sales data. Learned a lot about my own weaknesses on the way.

Wengo.fr

Teleco R&D Engineer

2006 – 2007

(1.5 years)

- Participated in the implementation of a **RTMP server** (Python/Twisted) and two RTMP clients (Python, ActionScript) supporting real-time media transport and two-way remote procedure calls. RTMP is the protocol used by Adobe Flash player to stream audio, video and data over the Internet.
- Based on previous work, developed a web application that allowed **2 to 5 people video & voice conference**, requiring only a web browser with Flash plugin installed. This product led Google engineers to visit Wengo in early 2007 (18 months before video Gtalk were released) and to offer to buy the company.
- Took part in the realization of a bridge between the RTMP server and Wengo's SIP platform (using Python and Gstreamer), that enabled users to **place calls to regular phones from a single web page**. It became the preferred way for placing calls to Wengo's marketplace.

Axialys Interactive

Software developer

2004 – 2006

(1.5 years)

- Developed many **Interactive Voice Response applications**, in C, Python and PHP. Applications ranged from French army enrollment process to promotional games on the Internet and the phone simultaneously. Was the privileged technical contact for these customers from end to end.
- Designed and implemented a **callshop resource management system (RMS)**, including a custom VoIP gateway based on Asterisk, an ajax-powered management console for real-time monitoring, and a billing system with printed invoice and loads of statistics.

Education

MSc in Computer Science

Oxford Brookes University, Oxford, UK

2004

Dissertation subject — *Toward Seamless Local Networking : An in-depth study of Zeroconf protocol suite, both from theoretical and practical points of view, along with an enhancement proposal for easy load-balancing support.*

<http://yoann.aubineau.free.fr/cv/dissertation.pdf>

MSc in Computer Science

Supinfo, Paris, France

1999 – 2004

I write Python, C, PHP, Javascript, Shell script ; I read C++, Java, Perl, LISP

I know Linux, PostgreSQL, MongoDB, Redis, SphinxSearch

I use vim, git, tmux

References

Fabien Reboia

colleague at MeilleursAgents,
major Data team contributor
fabien.reboia@gmail.com

Nicolas Graffin

former freelancing partner
ngraffin@egue.fr

Antoine Pitrou

colleague at Wengo,
Python core-developer
antoine@pitrou.net

Jérôme Wagner

CTO at Wengo
jerome.wagner@wengo.com

Nicolas Bougues

CTO at Axialys Interactive
nbougues@axialys.com

Alick Mouriessse

President of Supinfo school
alick.mouriessse@supinfo.com

Hobbies

Mountain sports: hiking, climbing, mountaineering

Water sports: surfing, scuba diving