

Younes Moumen



CTO, ATLAN Space

Innovation addict, realistic, engaged and experienced engineer in the fields of ICT, Artificial Intelligence, Robotics, R&D and IP Management with past and current entrepreneurship adventures

Address: 5 rue de la convention,
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Year of birth: 1983

Inventor in 16 granted patents

Including **4 international patents**
over PCT

Author in 7 peer reviewed scientific papers

Experience

CTO, Co-founder

since 01-02-2017

ATLAN Space

- Architect and lead developer of ATLAN Space's team with awards winning **Artificial Intelligence core software**
- Co-authored and co-invented **novel deep learning models and prediction methods**
- Won the Marine Protection prize in 2018 funded by the **National Geographic Society**
- Ranked at top **10 best innovations in Africa** in 2017 by **African Innovation Foundation**
- Ranked at **top 3 best innovations in Africa** by BMCE bank of Africa at **African Entrepreneurship Award**
- Won **Cleantech innovation program** organized by **United Nations Industrial Development Organization**

**Intellectual Property Manager and Prototyping engineer at
Technology Transfer Office in R&D department**

15-11-2013 till 31-01-2017

International University of Rabat

- Had the opportunity to work in a great team of 3 that:
- Promoted the university to the **first rank** as the **most innovative organization in Morocco** with an **award** handed by the **Head of Government** of Morocco
- With **131 patents** drafted and filed for the university and partner inventors, we **contributed with 14.41% of all national patents filed in Morocco**
- Achieved the **first success stories of technology transfers by licensing in Morocco from a university to the industry.**
- Managed a **portfolio of 177 filed patents.**
- Developed prototypes for **14 projects**
- Provided advice in the incubation of **2 start-ups**

Technical Consultant

since 01-03-2012

Cinto.Soft (mobile and cloud solutions development)

- Technical lead of **4 commercial software projects**
- Optimized the commercial and technical processes using industry standards

Trainer

from 01-09-2010 until 14-11-2013

ISERT, SUPMTI Oujda, Bank Of Africa

- Teacher of an initiation to **video games** developement unit at SuplInfo
- Instructor at a seminar in Governance of Information Systems for **CIOs of Bank Of Africa**
- Teacher of **embedded systems**, and mobile software programming

Associate and Chief Technical Officer (CTO)

from 01-02-2009 until 14-11-2013

INKFAST

- Implemented management processes of the Technical Department following CMMI and ITIL recommendations
- Successfully delivered **critical projects**. Main clients: **Ericsson, Maroc Telecom, Ministry of Equipment and Transportation**, Eurosol with large clients base and sensitive data management.

Projects Manager

from 01-10-2007 until 01-02-2009

INKFAST

- Planned, managed and delivered revenue generating services worth 9 MDH
- Managed about 110 B2B clients accounts.
- Design products software architecture

Software developer

from 01-10-2005 until 01-10-2007

INKFAST

- Standalone, embedded and server side **distributed games and applications development projects**: worked on 24 software projects
- Development of **4 commercial mobile games**
- Software deployment on server side
- Software porting to multiple platforms
- Management of development and acceptance tests

Skills

- **RESEARCH, DEVELOPMENT AND INNOVATION:** Strategic advice in Intellectual Property, Patents drafting and filing, IP management, management of innovation projects, prototyping, drafting of license agreements, technology transfer techniques, and business incubation.
- **ROBOTICS AND GAMING ARTIFICIAL INTELLIGENCE:** autonomous behavior, exploration, optimization, deep learning networks, reinforcement learning, genetic algorithms.
- **SOFTWARE AND HARDWARE DESIGN, DEVELOPMENT, INTEGRATION AND DEPLOYMENT:** Design of systems architectures, Datacenters management (experience in HP and IBM hardware), deployment of database systems clusters, load-balancing and fail-over availability tools for MySQL, Apache, Oracle, OpenERP, Helix, multiple Java containers, DNA, Darwin streaming server, multiple telco gateways for SMS/MMS/WAP...
- **TECHNOLOGY WATCH:** Technical novelty, State of the art and Freedom of use researches, reporting in specific technical domains
- **SLEEVES UP SKILLS:**
 - Programming: **Java, C/C++, PHP**, JavaScript, PLSQL, Python, Prolog, C#, XML based languages...
 - Hacking: Electronics, Mechatronics, Micro-electronics and embedded systems, robotic systems, Microchip, Arduino, ARM based **Raspberry PI, nvidia jetson series** and other Systems on Chips
 - Infographics: Adobe **Photoshop**, Adobe **Fireworks**, Autodesk **3D Studio Max**, some other open source tools

Aptitudes

- Resilient
- First mover
- Committed
- Stress tolerant
- Insatiable learner
- Self-confident
- Good listener
- Always curious and open minded
- **Languages:** English, French, Arabic

Education

Information Systems Engineer

2000-2005

National School of Applied Sciences

Baccalaureate in mathematical sciences with French language option

1999-2000

Lycée Ziri Ibn Atia at Oujda

Extra-professional activities

Council chairman

Since 2014

Alumni organization of the National School of Applied Sciences (Oujda)

Member then secretary general

Since 2010

Club Atlas des Randonnées Pédestres (Atlas Hiking Club)

Independent developer

Since 2002

Founder of 6 Open Source projects and participant in 2 others (I did suspend my contributions for lack of time)

Certificats

- Certified drone pilot in France
- Part 107 UAS Federal Aviation Administration of USA 1000083-20190222-00451
- Certificate of the World Intellectual Property Organization's IP Management DL-450
- Certificate of the World Intellectual Property Organization's Advanced copyrights and related rights DL-201
- Web training on Entrepreneurship by Tempus (A European Union program)
- Web training on Patents drafting by WIPO (World Intellectual Property Office)
- 5 days training on Industrial property by OMPIC (Moroccan Office of Industrial and Commercial Property)
- Seminar on Technology watch tools by OMPIC
- Seminar on Managing innovation projects by CE3M (Moroccan Electronics Mechanics and Mechatronics Cluster)
- International seminar on enhancing innovation support and commercialization of R&D results and patents by CIDC, WIPO, COMCEC and OMPIC
- Seminar on start-ups innovation by the association R&D Morocco

Hobbies

- Robotics and drones
- Information systems security and safety
- Hacking devices
- Physics computer simulations (mechanics, electromagnetism, thermodynamics)
- Literature (English, American, French and Arabic) : fiction (fantastic, philosophic, sci-fi, social), sciences (physics mainly), cultures et history
- Video games modification, development and use
- Cinema and TV

Patented Inventions

Title	Filing date	Filing #
Movable toll station	31/03/2014	MA 36871
	28/11/2014	PCT/MA2014 /000045
Mobile heat propagation simulator	10/10/2014	MA 37412
Coding and intelligent identification for the examination room	28/11/2014	MA 37592
	23/12/2015	PCT/MA2015 /000026
Water heating by cooling concentrated solar collector cells	10/12/2015	MA 38666
Valve for pressurized gaseous liquid bottles	09/05/2016	MA 39329
Milk boiling sensor	09/05/2016	MA 39332
Signature pen with digital imprint	09/05/2016	MA 39334
Energy storage for hybrid solar air conditioning	30/09/2016	MA 39365
Method of routing mobile telephone calls to landlines	02/12/2016	MA 39519
Wind turbine regulation and protection method and system with energy recovery	02/12/2016	MA 39521
Coordination method between a plurality of unmanned vehicles equipped with decision autonomy	05/09/2016	MA 39324
Detachable landing gear drone	05/12/2017	MA 41565
Flight planning of unmanned aerial vehicle guided by rotative camera with the objective of optimizing search of targets	05/12/2017	MA 41571
	04/12/2018	PCT/MA2018/050012
Autonomous navigation and behavior of unmanned vehicle without link with control station	05/12/2017	MA 41572
	04/12/2018	PCT/MA2018/050013
Mechanical attachment for detachable landing gear	06/12/2017	MA 41573
Method of real-time target detection from aerial photos using limited system	27/12/2018	MA 44149

Scientific papers

- El Habchi, A., Baibai, K., Moumen, Y., Zerrouk, I., Khiati, W., Rahmoune, N., ... & Bouchentouf, T. (2022). Social distance monitoring using YoloV4 on aerial drone images. In *E3S Web of Conferences* (Vol. 351, p. 01035). EDP Sciences.
- Zerrouk, I., Moumen, Y., Khiati, W., El Habchi, A., Berrich, J. and Bouchentouf, T. (2020). Tinkering with Yolo v2 architecture to increase small objects detection. *IEEE - International Symposium on Advanced Electrical and Communication Technologies (ISAECT2020), Kenitra, Morocco*
- Aissi, M., Moumen, Y., Berrich, J., Bouchentouf, T., Boughaleb, M., and Rahmoun, M. (2020). Autonomous solar USV with an automated launch and recovery system for UAV: State of the art and design. *IEEE 2nd ICECOCS*
- El Habchi, A., Moumen, Y., Zerrouk, I., Khiati, W., Berrich, J. and Bouchentouf, T. (2020). A new approach to estimate the geolocation of a ground target from drone aerial imagery. *ICDS2020 4th*
- Khiati, W., Moumen, Y., El Habchi, A., Zerrouk, I., Berrich, J. and Bouchentouf, T. (2020). A new approach based on the grid-clustering algorithm to solve a CPP type problem for air surveillance using UAVs. *ICDS2020 4th*
- Khiati, W., Moumen, Y., Zerrouk, I., Berrich, J. and Bouchentouf, T. (2019). Air surveillance planning approach for large areas. *ICDS IEEE Xplore digital library effective 2019-12-27*
- Zerrouk, I., Moumen, Y., Khiati, W., Berrich, J. and Bouchentouf, T. (2019). Detection process of ships in aerial imagery using two convnets. *International Conference on Wireless Technologies, Embedded and Intelligent Systems (WITS), Fez, Morocco, 2019, pp. 1-8, doi: 10.1109/WITS.2019.8723734.*