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March 18, 2024

***Recommendation for MSc. Mélik Lemariey***
***Independent Consultant***

Dear Colleague,

I am writing to enthusiastically recommend MSc Mélik Lemariey, an independent consultant, for his exceptional work in the field of electronic warfare, thermodynamics and artificial intelligence (AI), particularly focusing on the concept of superalignment of AI and the development of frameworks to mitigate human biases.

Throughout my interactions with MSc. Lemariey, I have been consistently impressed by his depth of knowledge, innovative thinking, and dedication to advancing the understanding and application of AI in various domains. His unique approach to addressing challenges in the field, especially concerning the alignment of AI systems with human values and the development of frameworks to minimize biases, reflects both his intellectual prowess and his commitment to ethical and responsible AI development.

MSc. Lemariey's expertise in thermodynamics has further enriched his contributions to the intersection of AI and other scientific disciplines. His ability to synthesize complex concepts and apply them to real-world problems demonstrates his proficiency and versatility as a consultant.

Moreover, MSc. Lemariey's professionalism, collaborative spirit, and strong skills in writing and lecturing have made him a valuable asset in multidisciplinary teams and collaborative projects. His meticulous attention to detail, coupled with his passion for excellence, ensures that he delivers results of the highest quality, exceeding expectations consistently.

Given his impressive professional journey, which has enabled him to attain the highest international accreditations, and his extensive professional experience, I have full confidence in MSc. Lemariey's ability to excel in any endeavour he pursues. His contributions to the advancement of AI and his dedication to ethical practices make him a standout candidate for any project or position related to AI development, thermodynamics, or interdisciplinary research.

In addition to his impressive contributions to the scientific and technological realms, MSc. Lemariey's work holds significant promise for economic advancement. Having worked extensively in the Asian financial and economic sector myself, I recognize the immense potential for MSc. Lemariey's innovative approaches to AI to drive economic growth, foster innovation, and address societal challenges in the region. His insights into the intersection of AI and economics could pave the way for transformative developments in industries ranging from finance and healthcare to manufacturing and beyond. As someone deeply engaged in the economic dynamics of Asia, I firmly believe that MSc. Lemariey's expertise has the potential to catalyze positive change and unlock new opportunities for sustainable development in the region.

In conclusion, I wholeheartedly endorse MSc. Mélik Lemariey and believe that he will continue to make significant contributions to the field of AI and beyond. Please feel free to contact me if you require any further information regarding my recommendation.

Sincerely,

Ludovic A. KRUNDEL, PhD
HK Polytechnic University


LA FRENCH TECH HONG KONG SHENZHEN

card/lafrenchtech/ludovic.krundel

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Partner @ Expando: https://www.expando.app/expert-profile/ludovic-krundel/r/reccdPE58u3Z6gemp

Make an appointment: www.calendly.com/ludovic-krundel

## Short CV of PhD Ludovic Krundel

## References and publications

1. "Neuromorphic Circuits, Systems, & Devices for the Sleek Control of Next Generation Autonomous Robots" - SUSTech SME Guest Lecture'22, 2022
2. "2021 AI Chips Applications" - Fintechport Symposium'21, 2021
3. "A Robot Monk Coach for Meditative and Relaxed State Induction and Training with Neuromorphic Co-processor System-on-Chip" - CSTS2017, 2017
4. "Stimulating the Comfort of Textile Electrodes in Wearable Neuromuscular Electrical Stimulation" - Sensors (Basel, Switzerland), 2015
5. "Spatially Distributed Sequential Array Stimulation of Tibial Anterior Muscle for Foot Drop Correction" - 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 2015
6. "Home Energy Management with PSO in Smart Grid" - IEEE 23rd International Symposium on Industrial Electronics (ISIE), 2014
7. "Kinect Depth Image-Based Door Detection for Autonomous Indoor Navigation" - RO-MAN, 2014
8. "Efficient Parallel Asynchronous Hardware Algorithm of On-Chip Cellular Automata for Formation of Utilizable Digital Neural Tissue" - IEEE-ROBIO 2013, 2013
9. "Autonomous Spiking Neural Network on SOC" - ICIEA2013, 2013
10. "A Compact Cognitive Co-Processor for Robotic Action Learning" - ASAB2012, 2012
11. "Ethical Methodology for the Design of Third Generation Robots and of New Advanced High-Tech Interactive Support" - SIRCon2011, 2011
12. "Spiking Neural Networks on Self-Updating System-on-a-Chip for Autonomous Control" - CCCA2011, 2011
13. "Dynamic Rule Learning in Cellular Neural Network Design – On an Autonomous Design Chip" - ITIP2010, 2010
14. "Autonomous Design in VLSI: an In-House Universal Cellular Neural Platform" - ISVLSI2010, 2010
15. "Growing and Learning on Silicon" - ISVLSI2010, 2010
16. "Self-adaptive Compact Neuro-controller for Natural Interaction and Training of Autonomous Communicating Robots" - SIRCon2009, 2009
17. "Harnessing Emergence with Self-Organization for Autonomous Architecture Design and High-Level Adaptation" - SEIC, 2009
18. "Self-Organizing Strategies for the Emergence of Goal-Adaptive Behaviours in Autonomous Communicating Machines" - International Symposium on Neural Networks and Econophysics, 2009
19. "Neural Networks with Cellular Automata" - Symposium on Neural Networks and Cellular Automata, 2008
20. "A Knowledgeable Authority for Interactive Hardware Design Capture Support" - VLSI-SoC 2006, 2006
21. "User-constrained Test Architecture Design for Modular SoC Testing" - ETS'04, 2004
22. "Les Turbo-Codes – la revue de littérature / The Turbo-Codes – the literature review" - Master's Article, 2003
23. "Conception d'une matrice de circuits robustes / Radiationproofing of SRAM, based on Toshiba reference design" - Master's Thesis, 2003

## Education:

- Doctorate in Self-Reconfigurable Micro-Architectures, focusing on self-learning cognitive chip systems.
- Master's of Science in Microelectronic and Automatic Systems.
- Master's of Engineering in Microelectronics and Control Engineering.
- Bachelor's in Sciences and Technologies for Engineering.

## Academic Experience:

- Held teaching and research positions at institutions such as The Hong Kong Polytechnic University, Shenzhen Institutes of Advanced Technology, and Dongguan University of Technology.
- Developed and taught courses in virtual reality, robotics, transformative technologies, and project management.
- Supervised final year projects and contributed to the establishment of new academic programs.

## Professional Experience:

- Served as Chief Technology Officer (CTO) in various technology firms in China, leading technical teams and driving AI solutions for predictive maintenance.
- Participated in startup acceleration programs and business competitions, securing substantial funding for innovative projects.
- Contributed to the development of cutting-edge technologies in fields such as AI, biotechnology, and virtual reality.

## Technical Skills:

- Proficient in programming languages such as C/C++, Python, MATLAB, and associated development tools.
- Extensive experience in hardware and software design, including VLSI and SoC.
- Familiarity with various operating systems and electronic design automation tools.

## Achievements and Funding:

- Received numerous awards and accolades, including Best Student Paper Award from IEEE and granted patents.
- Successfully obtained substantial funding for research and development projects in AI, biometrics, and virtual reality.

***Dr Ludovic A. KRUNDEL***
***AI Neuromorphic Circuits, Systems & Devices***

## SUMMARY

| | | |
|---|---|---|
| Meticulous | Analytical | Good presentations |
| Patient | Quality-oriented | Interpersonal skills |
| Methodical | Rigorous | Sensible |
| Industrious | Passionate | Approachable |

## Education

2005 – 2012
**PhD & further research**

- ✓ **PhD on Self-Reconfigurable Micro-Architectures: *"On Microelectronic Self-Learning Cognitive Chip Systems,"*** Wolfson School of Mechanical, Electrical & Manufacturing Engineering, Loughborough University, UK, 15 July 2016.

2002 – 2003
**M.Sc. Honours**

- ✓ **Microelectronic & Automatic Systems**, mandatory one-year postgraduate research degree required before doctoral studies in France equivalent to M.Sc. With honours (2:1), Doctoral School of Montpellier University of Sciences, France, 26 September 2003.
  - **I obtained the best mark of 18/20 for my literature review paper on Turbo-Codes (Information Theory).**

2000 – 2003
**M.Eng.**

- ✓ **Microelectronics & Control Engineering,** last three of five-year degree equivalent to M.Eng., Polytech'Montpellier Highly Selective French Engineering School, Montpellier University of Sciences, France, 22 October 2003.
  - **I was trained as a Kuka robotic arm operator.**

1997 – 2000
**B.Sc.: Good Honours**

- ✓ **Sciences & Technologies for Engineering**, undergraduate degree equivalent to B.Sc. With good honours (1st class & ranked 4th/76; ranked 1st in Maths with outstanding overall mark of 15/20), Montpellier University of Sciences & Technologies, France, 14 May 2001.

## PREVIOUS ACADEMIC POSITIONS

| | |
|---|---|
| May 17 – Aug 19<br>Teaching & Research | ✓ **Research Associate – Teaching Researcher. School of Design, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong.**<br>○ Taught VR&AR, Robotics, Transformative Technologies (HealthTech), Globalisation in Newsmedia, Project Management to our MScMET Master's students, with involvement of the PhD students.<br>○ Supervised the FYPs (Final Year Projects) of the MScMET students.<br>○ Created the new VR&AR courses from scratch. Updated the TransTech courses.<br>○ Drafted and finalised the VR&AR syllabus for the students' handbook.<br>○ Managed the assessment rubrics and performed the assessment of our students.<br>○ Grants writing & conducting the projects of the Digital Entertainment Lab. Integrated & ran a novel Biofeedback Ecosystem Platform with VR&AR for research, studies, therapy & commercialisation.<br>○ Liaised with industry partners as well as universities, associations & institutes.<br>○ Developed novel affective edutainment technology for wellbeing.<br>○ **A good number of students that I have been supervising have gone into sustainable, profitable & meaningful businesses.** |
| May 16 – Sep 17<br>Teaching | ✓ **Managing Instructor, DGUT-CNAM, Dongguan University of Technology, Dongguan, China.**<br>○ Head of Telecommunications & Networks department.<br>○ Developed entire curricula & syllabi for the BSc students in engineering. |
| Dec 14 – Nov 15<br>Postdoc | ✓ **Research Scholar in Smart Robotic Prosthesis. SIAT-CAS, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Neural Engineering Lab, Shenzhen, China.**<br>○ Helped to research & develop a microchip at the forefront of technology for the intelligent & compact data & event control of an innovative robotic hand prosthesis.<br>○ Worked on a novel device for ankle rehabilitation and published in Sensors. |
| Apr 05 – Nov 14<br>PhD Project | ✓ **Distinguished Researcher in 'Machine Learning' algorithms. Electronic Systems Design Group at the Wolfson School of Mechanical, Electrical & Manufacturing Engineering, Loughborough University, UK.**<br>○ **I created a new area of research. Developed an asynchronous digital version of spiking data brain's cells model & novel distributed learning algorithms for VLSI-SoC implementations & ASIC prototyping on FPGA. '*Big cognitive chips for high-adaption & self-learning*.' Made a few notable scientific & technological breakthroughs detailed in my thesis, papers & presentation.** |
| Oct 09 – Jun 10<br>Researcher | ✓ **Electronic & Robotic Engineer. Biophotonics & Health Technology Group at *ditto to above*.**<br>○ Design, development, integration & tests of actual biomedical equipment: optical blocks, clinical probes, sensors & data control boards around PIC microcontrollers.<br>○ **I successfully performed live demonstrations to customers included at WorldExpo, Shanghai; the company could get the next round of funds.** |

## WORK EXPERIENCE

Feb 24 - Present

✓ **CTO of NAONOW Laboratoires ludiques Company, Shenzhen, China.**

Feb 23 – Jan 24

✓ **CTO of [www.SyncPro.biz](http://www.SyncPro.biz) Marketing Technology Company, Shenzhen.**

Feb 21 – Jan 23

✓ **Co-Founder & Vice President of Fintechport** (JV with Runjie company): Managing Director, Program Leader, & Consultant: facilitating, coaching & teaching startups worldwide, also live-streaming with our media centre. Guiding international talents & startups through the A to Z process & in China.

Mar 20 – Jan 21

✓ **Co-Founder & CTO of *Symphony Technologies (Comtech spinout)*, Shenzhen, China. PdM solution, [https://symphony.today](https://symphony.today)**

✓ **Responsibilities:**

- A. Led the whole tech team & the system architecture
- B. AI solutions for predictive maintenance (PdM) with *Matlab* (prototype) & *Python*+Tensorflow+Keras on AWS.
- C. Expert System & D&ML methods for automated vibration diagnosis & synth.
- D. Backend with Zigbee, MongoDB, MQTTS & RESTful
- E. Amazon Web Service (AWS) Cloud with Ubuntu & Lambda
- F. JSON & REST APIs
- G. Frontend with Android Tablet & Apple iOS iPad & iTV apps for dashboard
- H. Data pre-processing including Fourier & Wavelet transforms, & analyses
- I. Business Development: I acquired HK MTR, HK Water filtrations, & L'Occitane en Provence as first customers. Conducting a pilot programme at L'Occitane's factory.
- J. We have won the "Hack Asia" competition.
- K. We won the Shenzhen WHub competition.
- L. We have raised just over US$½M in Seed fundings & now at US$4.4M.

Aug 19 – May 20

COMTECH 科通

✓ **AI Director, *Comtech, IngDan,* Shenzhen, China.**

- Milk-It baby formula home handheld sensor in partnership with **IMEC, Belgium.**
- AI IoT Predictive Maintenance for machines with moving parts based on vibration sensors' data; projects accelerated by **IngDan incubator.**

Dec 15 – Apr 17

✓ ***Xenosky*, i-Park, Tanglang, Xili, Nanshan North, Shenzhen, China.**

- Helped designing & developing medical scanners series & drones.

Oct 04 – Sep 09

✓ **Research Engineer at the R&D group of ARM Ltd., Cambridge, UK.**

- Worked on the *intelligent energy management* (IEM) project for the ARM926EJ-S core processor & liaised on my PhD works.
- **It afforded the company to commercialise its new microprocessor designs for mobile users.**

| | |
|---|---|
| Nov 03 – Sep 04 | ✓ **Digital Design Engineering FPGA Chip Programmer (& co-founder). MENTA Engineering Company, Montpellier, France.**<br>○ Implemented – in FPGA – JPEG2000 compression/decompression hardware algorithms based on wavelet transforms. I developed various 'IP Designs' in VHDL RTL with « *Xilinx Virtex-II Multimedia Development Board* ». I also drafted technical notes & documents. And I sought vital customers such as Canon, Nikon & Sony.<br>○ **The startup could then get funded. Now eFPGA company in Sophia Antipolis.** |
| Feb 03 – Oct 03 | ✓ **SoC Test Developer. PHILIPS Research Labs (The Natlab), Eindhoven, Holland.**<br>○ I enhanced in C/C++ an EDA tool generating optimal *Test Architecture Designs for SoCs (Systems-on-Chips)*. I elaborated a user specification language 'TAS' now widely used. Presentation: 30 people, report: 111 pages.<br>○ **I co-authored an IEEE publication on this patented work with heuristic algorithms for Expert Knowledge System (AI) & a thorough mathematical model; patent and tool now used by all companies in the silicon industry. Presented the works to 250 professors and industry professionals (Talk).** |
| Sep 02 – Jan 03 | ✓ **ASIC Chip Designer at the LIRMM of Montpellier in collaboration with iRoC Technologies Company of Grenoble, France.** Radiation-proofed Toshiba SRAM for space & on the ground. VLSI design, comparisons, simulations, synthesis, & layout of the prototype. Presentation: 12 people, report: 66 pages.<br>○ **It allowed the company to commercialise this hardened chip for heavy-duty professional uses. The CEA also tested it, France/Switzerland.** |
| Oct 02 | ✓ **Technological tutorial at AIP Laboratory, Toulouse, France.**<br>○ Real-time cartography representing the environment where a mobile robot endowed with sonars travels. Matrix least-squares method in embedded C/C++.<br>○ **The mobile robot was drawing the map upon discovery of the terrain & was always avoiding all obstacles.** |
| Sep 01 – Aug 02 | ✓ **Innovation Designer at the technical department of SOLEM Cap Alpha Company, France.**<br>○ Developed & tested embedded modems for an innovative application: « *mobile palmtop badge readers* ». I made RS232/TTL interface boards. Implemented modem functionalities on PIC & 8051 microcontrollers.<br>○ **The company patented this invention & commercialised their products series at various ranges, hence becoming sustainable.** |
| Sep 00 – Aug 01 | ✓ **Embedded Software Programmer at ALSTOM T&D P&C Company, Lattes, France.**<br>○ Developed a « *browser* » in C/C++ using the decision tree technique of Artificial Intelligence. Real-time introspection of unknown embedded EDF servers architectures from a client machine. EDF is the national France power grid.<br>○ Adaptive generation then automatic XSL processing of an XML configuration file matching the server architecture.<br>○ **The company could move to the next essential step.** |
| Jun 98 – Aug 00 | ✓ Installations of internet networks in university office buildings, part-time during university holidays, Montpellier, France. |
| Jun 94 – May 98 | ✓ Postman, part-time during high-school holidays, Cournonterral, France. |

## FUNDINGS

| | |
|---|---|
| 2021 | ✓ Entered NVIDIA Inception Program, cooperation with Fintechport. |
| 2020 | ✓ Obtained commensurate startup funds & LOIs from official VCs such as HAX, Brinc, Cyberport & K-Startups. Raised a total of US$4.4M. |
| 2019 | ✓ Submitted ITF Platform R&D project HK$3M+ in September for "Biometrics in VR, sounds & lights, an innovative Biofeedback approach." |

- ✓ Submitted ITF Platform R&D project HK$3M+ in April for "GOAAL: a 3D GPS-based All Reality platform with Blockchain."
- ✓ iQIYI sending significant funds to our lab to research, develop & deliver better products, services, platform & community in most aspects (e.g. looks & performance) than HTC Vive or Oculus Rift/Go.
- ✓ Government contact of Shanxi Province, China, sending matching funds with iQIYI to open the first massive VR-based eSport Center of its kind & looking to duplicate it within tier 2 & also tier 3 provinces.
- ✓ Up to US$450M from Malaysia to research & develop new AI/ML in VLSI-based robots. "English robot teachers mediated via TV" to cover ~700M students per broadcast.
- ✓ Runner up team for the China national AI competition organized & sponsored by *iflytek*: "Cocktail Party Solution!"
- ✓ Organized a summer camp at the beach with mountains, streams & waterfalls in MeTown, Xichong.
  - Taught kids of all ages to work together as teams on projects completion. Along the way they learned & developed self-respect, confidence, communication skills, natural sciences, cooking, music, art & technology. We brought ideas to the forefront so that we could write better contents for our online educational video platform.

2018

✓ Runner-up team at EngineeringYes "*Concentrated MBA*" Business Competition, Milton Keynes & then Birmingham (final round), UK. I won several prizes such as *Best Elevator Pitch* (£250) & *Most Congruent Team* (£250). http://www.engineeringyes.org/2013photos.html

2016

2013

Nov 2011 ✓ Best Student Paper Award – Honourable Mention at IEEE-sponsored SIRCon2011 conference, Taichung, Taiwan.

Aug 2011 ✓ IEEE Outstanding Student Humanitarian Prize – US$1,000: http://www.ieee.org/membership_services/membership/students/competitions/change_the_world/2011_winners.html, IEEE Presidents' Change the World Competition.

Oct 2010 ✓ Patents: CN 201110262843.5 – and – CN 1023092315 A

Apr 2009 ✓ Finalist within the 2008 Wany Robotics 'academic partnership contest': http://www.wanyrobotics.com/academic-partnership-program.html

Apr 2007 ✓ Organized IEEE sponsored 7th WSEAS ROCOM'07 conference in Hangzhou, China.

2004 ✓ **Have been granted eleven scholarship/sponsorship awards, of which eight (8) in France & three (3) in the UK:**
- Six (6) PhD-like scholarships in French laboratories & two EngD-like sponsorships from Atmel & Certess companies in France;
- Two (2) PhD scholarships with the University of Southampton & with **Loughborough University (I decided to go for this one)**, and;
- One (1) EngD sponsorship with ARM Ltd., Cambridge in the UK.

May 2004 ✓ **Organized IEEE-sponsored ETS'04 with the organizing team of the LIRMM laboratories:** http://www.lirmm.fr/ETS/ETS04/memories/organisation/orga.htm, Corsica.

Jul – Sep 2003 ✓ Preparation, hand-in & presentation of a ten-page **full literature review research article** on "Turbo-Codes" as part of the M.Sc. programme. (I obtained the highest mark for this piece of research work: 18/20.)
- Subjects included: **information theory**, joint source/channel coding with a feedback loop, interleaving methods, measure & computation of **information entropy**, & a priori / a posteriori **algorithmic estimator** implementations, **performance optimization**, data & devices.

May 2003 ✓ **Organized IEEE sponsored ETW'03 with the organizing team of PHILIPS Research Labs, "The NatLab":** http://www.ieee-ets.org/etw03/memories_organization_team.htm, Maastricht, Holland.

May 2002 ✓ **"*E=M6*" national robotic cup: 15th/170 teams**. Technical member of the Robotic Club of ISIM. I developed the command & subjection boards. Programmed the H8 in C to get the robot autonomous.

## ADDITIONAL SKILLS

**Languages**

2008
Since 2003

- ✓ Fluent in English; Native French Speaker; Intermediate Spanish (achieved full fluency before in 2003); Beginners-Intermediate Chinese.
- ✓ Teaching Skills for Postgraduates certificate: teaching at universities & schools.
- ✓ First Aid diploma for the professional field.

**Microelec. & IT Skills**

- **Programming:** Balsa/Teak (asynchronous hardware algorithms), Verilog/VHDL, C/C++/C#, Python, Tensorflow, Keras, JSON, MQTT, MongoDB, AWS Lambda, Assembler, WatcomC, Petri Nets, XML, HTML, Scheme, Java;
- **Hardware:** VLSI, SoC, STM32, TI, PIC, Raspberry Pi;
- **Software:**
  - Matlab, ModelSim, Xilinx ISE with ChipScope Pro, Lush, Visual Studio;
  - *Cadence EDA tools*: NCLaunch, Virtuoso (Spice), SpectreRF;
  - *Microchip PIC*: MPLab;
  - *Typesetting system*: LaTeX;
  - *Picture editing*: Gimp, xfig, TGIF.

**OSes**

- **Unix:** Ubuntu, Debian, Raspbian, HP Unix, OpenSolaris, CentOS, Linux, QNX (real time OS)**; macOS Monterey; Windows:** XP, 10**.**

## GENERAL INTERESTS & OTHER ACTIVITIES

Enterpreneur--ship

- Elected by Unanimity **Vice President** of **La French Tech** Shenzhen, China
- **Expert** in **www.Expando.world** platform, HK
- **Partner** with **www.Widoowin.com** CF M&A system, Paris & HK
- **Connector** at **www.founderslair.com** startups investments platform, SGP
- Board of directors at www.dba.com.hk , HK
- Member of www.asiaceo.club Community, HK
- Board member in VR|AR & Robotics of the Hong Kong NGO/NPO www.DEEPTECK.com committee: supporting PhD students in Hong Kong.
- International Advisor of IIT's Data Science Club, for India.

Education

- I am teaching Sciences & Engineering subjects as well as English & French languages at all levels.

Music

- **Keyboard player** in gigs as a (self-taught) in professional pop & rock bands for public animations. Making midifile. Teaching the piano.
- 9th national song competition *José Janson*: managed & coached two candidates.
- Musical compositions: arrangements & sound taking of Fred'Quarato CD: "*Brassens en Jazz*". My own compositions as well.

Sport

- ✓ Badminton, squash, tennis, table-tennis, volleyball, jogging, & swimming.

Professional Development

- ✓ Business competitions. Startup acceleration. Reading of scientific magazines on new technologies & astrophysics to stimulate my research activities.

## REFERENCES & PUBLICATIONS


**[23]** Ludovic Krundel, "Neuromorphic Circuits, Systems, & Devices for the Sleek-Control of Next Generation Autonomous Robots," SUSTech SME Guest Lecture'22, School of MicroElectronics, Southern University of Science & Technology SUSTech, Shenzhen, China, Sept 15, 2022 (Talk)

**[22]** Ludovic Krundel, "2021 AI Chips Applications," Fintechport Symposium'21, QianHai Financial Center, Shenzhen, China, Aug 31, 2021 (Talk)

**[21]** Ludovic Krundel, "A Robot Monk Coach for meditative and relaxed state induction and training with neuromorphic co-processor System-on-Chip," CSTS2017, Shanghai, China, Sept 25, 2017 (Talk)

**[20]** Hui Zhou, Yi Lu, Wanzhen Chen, Zhen Wu, Haiqing Zou, Ludovic Krundel, Guanglin Li, "Stimulating the Comfort of Textile Electrodes in Wearable Neuromuscular Electrical Stimulation,"Sensors (Basel, Switzerland), Jan 16, 2015 (Journal); https://www.mdpi.com/1424-8220/15/7/17241

**[19]** Hui Zhou, Yingying Wang, Wanzhen Chen, Nanxin Zhang, Ludovic Krundel, Guanglin Li, "Spatially distributed sequential array stimulation of tibial anterior muscle for foot drop correction," 2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 2015 ; https://ieeexplore.ieee.org/abstract/document/7319124/similar#similar

**[18]** Yimin Zhou, Yanfeng Chen, Guoqing Xu, Qi Zhang, Ludovic Krundel, "Home energy management with PSO in smart grid," 2014 IEEE 23rd International Symposium on Industrial Electronics (ISIE), 2014 ; https://ieeexplore.ieee.org/document/6864865

**[17]** Yimin Zhou, Guolai Jiang, Guoqing Xu, Xinyu Wu, Ludovic Krundel, "Kinect depth image based door detection for autonomous indoor navigation," 2014 RO-MAN. The 23rd IEEE International Symposium on Robot and Human Interactive Communication, 2014 ; https://ieeexplore.ieee.org/document/6926245

**[16]** Ludovic Krundel, David Mulvaney, Vassilios Chouliaras, Yimin Zhou, Guoqing Xu, "Efficient Parallel Asynchronous Hardware Algorithm of On-Chip Cellular Automata for Formation of Utilizable Digital Neural Tissue," in IEEE-ROBIO 2013: 2013 IEEE International Conference on Robotics and Biomimetics: 'Robots living with human being in modern society', Shenzhen Institute of Advanced Technologies (SIAT), Shenzhen, China, Dec. 12–14, 2013 ; https://ieeexplore.ieee.org/document/6739603

**[15]** Yimin Zhou, Ludovic Krundel, David Mulvaney, Vassilios Chouliaras, Guoqing Xu, "Autonomous Spiking Neural Network on SOC," in ICIEA2013: Proceedings of the 8th IEEE Conference on Industrial Electronics and Applications, pp.1106-1111, Swinburne University of Technology, Melbourne, Australia, Jun. 19–21, 2013 ; https://ieeexplore.ieee.org/document/6566532

**[14]** Ludovic Krundel, David Mulvaney, and Vassilios Chouliaras, "A Compact Cognitive Co-Processor for Robotic Action Learning," in ASAB2012: Special Issue of Animal Behaviour, Association for the Study of Animal Behaviour (ASAB) Interdisciplinary Workshop 2012: 'Physical Cognition & Problem Solving', University of Birmingham, UK, Jun. 27–28, 2012 ; https://www.researchgate.net/publication/258972593_A_Compact_Cognitive_Co-Processor_for_Robotic_Action_Learning .

**[13]** Ludovic Krundel, Ya-Chien Huang, David Mulvaney, and Vassilios Chouliaras, "Ethical Methodology for the Design of Third Generation Robots and of New Advanced High-Tech Interactive Support," in SIRCon2011: Proceedings of the 2011 IEEE sponsored International Conference on Service and Interactive Robotics (SIRCon), IEEE Robotics and Automation Society (IEEE-RAS) and Robotics Society of Taiwan (RST), National Chung Hsing University, Taichung, Taiwan.
IEEE Systems, Man, and Cybernetics Society, Nov. 24–26, 2011 ; https://www.researchgate.net/publication/258972640_Ethical_Methodology_for_the_Design_of_Third_Generation_Robots_and_of_New_Advanced_High-Tech_Interactive_Support

**[12]** Yimin Zhou, Ludovic Krundel, David Mulvaney, and Vassilios Chouliaras, "Spiking Neural Networks on Self-Updating System-on-a-Chip for Autonomous Control," in CCCA2011: Proceedings of the 2011 IEEE sponsored International Conference on Computers, Communications, Control and Automation (CCCA 2011), Hong Kong, China, Feb. 20–21, 2011 ; https://www.researchgate.net/publication/258972614_Spiking_Neural_Networks_on_Self-Updating_System-on-a-Chip_for_Autonomous_Control

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