Rodrigue Dimitry NGONGANG

Developer & Teacher-Researcher In Robotics/Artificial Intelligence.

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Professional experience in research and development

Sep, 21-Jan, 24 **Developer and Researcher in Robotics & AI,** Russian University of Biotechnology < **ROSBIOTECH/> Project:** Design and implementation of a robotic arm for food labeling "DAN-BOT".

Tasks accomplished:

- Perform the SLAM of the "DAN-BOT" robot;
- Simulate obstacle detection by a mobile robot;
- Simulate a robotic arm to move a ball on a table;
- Restore and back up images provided by the robot;
- Produce the technical file and the project specifications;
- Configure the TurtleBot and install software for 3D sensors;
- Assemble the robotic arm using Xacro and control it in Gazebo;
- Improve the facial recognition of the autonomous mobile robot "PIAM-BOT";
- Simulate the autonomous navigation of a mobile robot capable of delivering mail;
- Test the 3D sensors in "Autonomous ROS2 Node Execution" node for visualization;
- Perform remote navigation of a mobile robot and manipulation of the robotic arm;
- Develop the ROS2 packages to make the URDF differential drive of the robotic arm;
- Process images and perform restoration and backup of images provided by the robot;
- Use OpenCV to detect obstacles and process images: zoom, cut, mirror, affine map and rotation;
- Program the autonomous navigation of a mobile robot on a square, rectangular and circular field;
- Develop and deploy multiple machine learning, deep learning, reinforcement learning, large language model, generative AI, and chatbot projects.

Sept.20- Jan.21 Developer of Mobile Robots (internship), Moscow Region State University < MGOU />.

Project: Design and production of an autonomous mobile robot with facial recognition "PIAM-BOT".

Tasks accomplished:

- Perform the SLAM of the "PIAM-BOT" robot;
- Produce the technical file and the project specifications;
- Ensure remote connection to the server with SSH security;
- Connect Wi-Fi, serial port communicates with external sensors;
- Implement the "PIAM-BOT" robot guidance and control program;
- Create a landing page, LED remote, weather phidget, and auto-start;
- Define a method of entry into the Raspberry Pi OS and transfer files remotely;
- Ensure control of the robot using Python programs and machine learning libraries;
- Write Linux and Vim editor commands, Raspberry Pi system backup, Pi cabling library;
- Design and build an autonomous mobile robot with facial recognition controlled by a Raspberry Pi board;
- Carry out the simulation of the following projects: Server FTP, Color_LED, avance, Car Run, ServoControlColor, KeyScanStart, Infrared_avoid, infrared_follow, suivi, avoid_ultrasonic, servo_avoid_ultrasonic, Bluetooth_control, TCP_control, Servo control, PS2_control.

- IT Consultant:

- Supporting start-up and infopreneur promoters in Africa;
- Train coaches in digital marketing, web & mobile development;
- Supervise professional interns from Africa, France, Canada, Germany and Russia;
- Supervise academic interns in Cameroon and France (IUSTE, IUGET, IT School, and IRIS);
- Train students from: the University of Yaoundé 2 (Soa), the University of Douala, and the Inter-State University of Sangmélima, École Polytechnique de Yaoundé.
- Supervise and coordinate work in: Website creation and hosting, IT and human resources project management,
 Writing business plans and quotes for IT projects, AI project realization and creation of ML & DL models,
 Development and monitoring of digital marketing strategies, Development of web applications, HTML5 templates,
 Video Games and Smart Bots.
- Full list of supervised projects: https://portfolio.africannewdream.fr
- Artificial Intelligence Developer, African New Dream < AND />.

Tasks accomplished:

- Use Seaborn libraries for data visualization;
- Program neural networks and create decision trees;
- Work on probabilities, statistics and Bayes' theorem;
- Implement the main clustering algorithms (k-means and DBSCAN);
- Manipulate the NumPy, Sklearn, Matplotlib, Pandas, and SciPy libraries;
- Do linear regression, multiple linear regression and polynomial regression;
- Write unsupervised learning and supervised learning (ML&DL) algorithms.
- Developer Web (React JS & Three JS), African New Dream < AND />.

Tasks accomplished:

- · Perform unit testing and integration testing;
- Integrate templates and develop a project from scratch;
- Coordinate with different teams working at different levels;
- Manage part or all of the process of creating a web interface;
- Develop 3D web applications, 3D websites, and 3D video games;
- Make decisions regarding the design of features to be developed;
- Create reusable front-end components and libraries for later use.
- Developer WordPress, African New Dream < AND />.

Tasks accomplished:

- Create and host more than 30 websites;
- Integrate and develop backends and frontends;
- Develop WordPress plugins and specific themes;
- Administer and maintain cPanel and NOC servers.
- Develop internal scripts and perform website migrations;
- Integrate HTML/CSS/SEO into websites and manage web services.
- Computer maintenance, African New Dream < AND />.

Tasks accomplished:

- Install and update software;
- Repair laptops and desktops;
- Plan data recovery and backup;
- Perform virus and spyware removal;
- Give advice and do IT consulting remotely, at home and locally.

Mar-Nov.17 Head of the Computer Science Unit, University Institute of Science, Technology and Technology

- Web Developer (React JS), University Institute of Science, Technology and Ethics < IUSTE />.

Tasks accomplished:

- Manage events and component;
- Create complete web applications;
- Display content with UI components;
- Manage hooks and test React applications;
- Set up a Frontend development environment;
- Manipulate the DOM, hooks, and child components.
- WordPress Developer, University Institute of Science, Technology and Ethics < IUSTE />.

Tasks accomplished:

- Manage custom user rights and access levels;
- Writing articles, terms of use, privacy and cookie policies;
- Website administration, plugin configuration and sitemap;
- Graphic design (posters, skinning, business card, logo, advertising spots);
- Creation and administration of the https://www.univ-stee.com/ website.
- Computer Network, University Institute of Science, Technology and Ethics < IUSTE />.

Tasks accomplished:

- Monitor and plan budgets;
- Deploy and maintain N-Computing and ToIP;
- Configure and update servers and applications;
- Regularly audit and control the security system;
- Install the cabling and update the equipment of the computer park;
- Analyze, address and prevent security risks, malfunctions and threats.

Sept. 15-Mars 17 – Python & Web Developer, Assnet.

- Python Developer, Assnet.

Tasks accomplished:

- Manipulate SQL databases with Python;
- Carry out automation scripts, and scrapping sites;
- Doing ethical hacking, unit testing, and debugging;
- Doing Python programming (databases, data and control structure collections, OOP);
- Develop cross-platform applications (iOS, Android, Mac, Windows) with the Kivy Framework.
- Web Developer (HTML, CSS & JS), Assnet.

Tasks accomplished:

- Ensure that the site is compatible with different browsers;
- Translate clients' graphic models into an appropriate language;
- Participate in the analysis and understanding of the Information System;
- Manage the responsive design of sites to different platforms (PC, Tablets, Mobile, etc.);
- Develop applications for inventory management, user and student account management.
- Webmaster, Assnet.

Tasks accomplished:

- Prepare and optimize the SEO of websites;
- Regularly review analyses that show site performance;
- Develop and manage the company's marketing strategy;
- Bring points of view during the reflection phase and propose solutions.
- Computer Maintenance, Assnet.

Tasks accomplished:

- Doing IT consulting remotely and at home;
- Ensure cybersecurity, virus removal and computer repair;
- Detect customer needs and diagnose the computer system;
- Carry out computer assistance and installations, data recovery and backup;
- Provide technical assistance with the installation and configuration of the network;
- Ensure the preventive and curative computer maintenance of the computer equipment.

Professional teaching experience

Teaching

Sept. 23-Jan.24 Lecturer in Robotics & AI, Russian University of Biotechnology < ROSBIOTECH />.

Teach master's students on mechanical recalls, geometric modeling, ROS2, Machine Learning, Deep Learning, Reinforcement Learning and OpenCV, *level 1*.

Type of course & number of hours: Lectures [128 hours], Tutorials [64 hours] & Practical work [64 hours].

Sep 22-Jan.23 Lecturer in Robotics, Russian University of Biotechnology < ROSBIOTECH />.

To give lessons to undergraduate students on the Kalman filter, the Bayesian filter, orthogonal linear estimators, state observers, the method and parameters of least squares, *level 4*.

Type of course & number of hours: Lectures [64 hours], TD [128 hours] & TP [64 hours].

Sept.21-Jan.22 Lecturer in Mobile Robotics, Russian University of Biotechnology < ROSBIOTECH />.

Teach undergraduate students on Linux, three-dimensional modeling, location, mapping and navigation of mobile robots, *level 3*.

Type of course & number of hours: Lectures [32 hours], Tutorials [32 hours] & Practical work [32 hours].

Sept.20- Jan.21 Mobile Robotics Teacher (internship), Moscow Region State University < MGU />.

Teach undergraduate students on robotics teaching methodology, 3D modeling and prototyping, and educational robotics, *level 2*.

Type of course & number of hours: Lectures [32 hours], Tutorials [32 hours] & Practical work [32 hours].

June 18-Jan. 24 Computer Science Teacher, African New Dream < AND />, hybrid (face-to-face and remote).

Train learners on python programming, web & mobile development, server administration, computer maintenance, digital marketing and online business creation.

Type of course & number of hours: Lectures [5,760 hours] & Practical work [2,880 hours].

Mar-Nov. 17 Lecturer in Computer Science, University Institute of Science, Technology and Ethics.

To give computer lessons to students of the BTS cycle, level 1.

Type of course & hourly volume: Lectures [320 hours], Tutorials [320 hours] & Practical work [120 hours].

Sep, 15-Jan, 17 Computer Science Teacher, Assnet.

Train learners on computer initiation and maintenance, office automation and the basics of the network.

Type of course & number of hours: Lectures [480 hours] & Practical work [480 hours].

Sep12-Jun 15 Mathematics and Physics Tutor, At home.

Give home rehearsals in mathematics and physics to high school students.

Handouts/Coursework

- [HC.33] R.D. Ngongang. Course work: Optimization methods in examples and problems. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, June 2024.
- [HC.32] <u>R.D. Ngongang.</u> **Course materials:** *Project management involving venture capital and grant investments.* Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, *May 2024*.
- [HC.31] R.D. Ngongang. Course materials: Theoretical mechanics. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, April 2024.
- [HC.30] R.D. Ngongang. Course work: Economics of higher education institutions. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, March 2024.

- [HC.29] <u>R.D. Ngongang</u>. **Research**: *Pedagogy and psychology of higher education*. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, *February 2024*.
- [HC.28] R.D. Ngongang. Report on teaching practices: *Pedagogical practice to acquire professional skills*. Russian University of Biotechnology, Moscow, Russia, *January 2024*.
- [HC.27] R.D. Ngongang. **Course work:** Chemical methods of analysis. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, *December 2023*.
- [HC.26] <u>R.D. Ngongang.</u> **Research:** *Automation and control of technological processes and production.* Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, *Nov. 2023*.
- [HC.25] R.D. Ngongang. Course materials: Pedagogical work of the Department of Physics and Mathematics.
 Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, October 2023.
- [HC.24] R.D. Ngongang. **Course work:** *Informational methods of data processing.* Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, *September 2023*.
- [HC.23] R.D. Ngongang. **Course work:** Educational work of the foot-and-mouth disease department. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, *June 2023*.
- [HC.22] R.D. Ngongang. Course work: History and philosophy. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, May 2023.
- [HC.21] R.D. Ngongang. Course work: Methods of information on data processing. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, April 2023.
- [HC.20] R.D. Ngongang. Course work: Russian and English courses. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, Mar. 2023.
- [HC.19] <u>R.D. Ngongang. **Research**: Invention and research</u>. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, *February 2023*.
- [HC.18] R.D. Ngongang. Report on Teaching Practices: Pedagogical practice to acquire professional skills. Russian University of Biotechnology, Moscow, Russia, January 2023.
- [HC.17] R.D. Ngongang. Course work: History and Philosophy of Science. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, December 2022.
- [HC.16] R.D. Ngongang. **Course materials:** The concept of the post-industrial society, the information society and the "knowledge society". Russian University of Biotechnology, Moscow, Russia, November 2022.
- [HC.15] R.D. Ngongang. Course work: Theory on the Internet of Things. Research work: Methodology of research programs by I. Lakatos. Course Materials: The concept of the post-industrial society, the information society and the synthesis of the "knowledge society". Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, October 2022.
- [HC.14] R.D. Ngongang. Course material: Methodological foundations of scientific knowledge. Definition of science. The main stages in the development of science. The concept of scientific knowledge and the methods of scientific knowledge. Report: Research Report & Report on the Individual Thesis Plan.

 Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, September 2022.
- [HC.13] R.D. Ngongang. Research work: Write the introduction to my thesis topic. Course material: Organization of scientific research and summary of research methodology. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, June 2022.
- [HC.12] R.D. Ngongang. Research work: To make the experimental research plan on my thesis subject, Analyze the introduction of the scientific article and produce the materials and methods for the scientific article: Advantages and disadvantages of robotic manipulators for the food industry. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, May 2022.
- [HC.11] R.D. Ngongang. Course material: Find information in open sources and search for keywords on Scopus.

 Research work: Analyzing the introduction of the scientific article: digitization, robots, artificial intelligence (AI) and modernity: theoretical and methodological aspect Russian University of Biotechnology "ROSBIOTECH", Moscow, Russia, April 2022.
- [HC.10] R.D. Ngongang. Course material: Vocabulary for writing a scientific text, Summary of my thesis topic and Stages of a student's scientific research. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, March 2022.
- [HC.9] R.D. Ngongang. Course work: Agent-based modeling. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, February 2022.
- [HC.8] R.D. Ngongang. Report on Teaching Practices: Pedagogical practice to acquire professional skills. Russian University of Biotechnology, Moscow, Russia, January 2022.

- [HC.7] R.D. Ngongang. **Course work:** The main types of worldviews and their characteristics, and My understanding of philosophy. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, December 2021.
- [HC.6] R.D. Ngongang. Course work: The problem of creating artificial intelligence. Virtual reality as a problem in the philosophy of technology. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, November 2021.
- [HC.5] R.D. Ngongang. Course work: Pairwise nonlinear regression and linear multiple regression. Experimental data processing with MS Excel. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, October 2021.
- [HC.4] R.D. Ngongang. Course work: Evaluation of the quality indicators of an object from the results of experiments, and Calculation of the coefficients of the linear regression equation. Experimental data processing with MS Excel. Russian Biotechnology University "ROSBIOTECH", Moscow, Russia, September 2021.
- [HC.3] R.D. Ngongang. **User guide:** Design and production of an Autonomous Mobile Robot with facial recognition controlled by a Raspberry Pi 4B board. Moscow Regional University "MGOU", Moscow, Russia, June 2021.
- [HC.2] R.D. Ngongang. Practice report: Practice the basics of professional activity, and Training based on the theoretical knowledge of the practical skills, professional skills and experiences of an independent robotics professional. Moscow Regional University "MGU", Moscow, Russia, January 2021.
- [HC.1] R.D. Ngongang. Course work: Robots in space. Moscow Regional University "MGOU", Moscow, Russia, December 2020.

Full list of my teaching experience: https://roding.africannewdream.fr/scientific-publications.

Academic Credentials

Sep21-Now **PhD student in Automation and Control of Technological and Production Processes**, Russian University of Biotechnology < **ROSBIOTECH/>**,

under the supervision of Prof. Margarita Mikhailovna BLAGOVESHCHENSKAYA.

Software and algorithmic support for intelligent technology manipulator control systems for food labeling.

Sep19-Jul21 **Master in Robotics Learning in Educational Institutions**, *State University of the Moscow region* MGOU />, under the supervision of Prof. Nikolay Nikolayevich LAVROV.">MGOU />,

Specialized training for graduates of educational universities in the field of programming neural networks.

Sept. 16-Jul 17 **Bachelor's degree in Computer Engineering**, *University Institute of Technology and Ethics < IUSTE />, under* the supervision of Mr. Bela Pierre NKOA.

Automated management of teaching: the case of the University Institute of Technology and Ethics (IUSTE).

Sept.14-Jul.16 Higher Technician Certificate (BTS) in Management Informatics, University Institute of

Technologies and Ethics, < IUSTE />,

under the supervision of Mr. Jacques TANJY, TANJY.

Grade management application: case of the University Institute of Technology and Ethics (IUSTE).

Teaching activities

2022-2023 **Kalman filter and Bayesian filtering,** *License 4 Computer Science and Engineering,* Russian University of Biotechnology < **ROSBIOTECH** />, *under* the supervision of Prof. Margarita Mikhailovna BLAGOVESHCHENSKAYA.

Responsible for half of the course for 24 students.

Orthogonal linear estimators and state observers, least squares method and parameters, *License 4 Computer Science and Engineering*, Russian University of Biotechnology < ROSBIOTECH />, *under* the supervision of Prof. Margarita Mikhailovna BLAGOVESHCHENSKAYA.

Responsible for half of the course for 24 students.

2021-2022 **Navigation of mobile robots,** *Bachelor 3 Computer Science and Engineering,* Russian University of Biotechnology < **ROSBIOTECH** />, *under* the supervision of Prof. M.M. BLAGOVESHCHENSKAYA.

Responsible for half of the course for 25 students.

Linux, three-dimensional modeling, localization & mapping of mobile robots, Bachelor 3 Computer

Science and Engineering, Russian University of Biotechnology < ROSBIOTECH />,

under the supervision of Prof. Margarita Mikhailovna BLAGOVESHCHENSKAYA.

Responsible for half of the course for 25 students.

2019-2021 Robotics teaching methodology, Bachelor 2 FTP, State University of the Region of

Moscow (MGOU), under the supervision of Doctor Marina Alexandrovna MUSATOVA.

Responsible for half of the course for 20 students.

3D Modeling and Prototyping, Bachelor 1 FTP, *Moscow Region State University (MGOU)*, under the supervision of Dr. Elena LEONIDOVNA.

Responsible for half of the course for 20 students.

Educational Robotics, Bachelor 2 FTP, Moscow Region State University (MGOU),

Under the supervision of PhD. Nafisa HASANSHINA.

Responsible for half of the course for 20 students.

2018-2020 Training and Coaching of Students in Cameroon, France and Germany< African New Dream, IUSTE, ASSNET, University of Yaoundé 2, ISMAT, ISTAG, École Polytechnique de Yaoundé, Inter-State University of Sangmélima, SCHOOL 55, IT School, IRIS />

Responsible for the course for more than 260 students, co-author of the course notes.

Python Programming, African New Dream, Vocational Training.

Course manager for 30 students per year, co-author of course notes.

Development web (WordPress/Html5/CSS3/JS/Bootstrap/React & Node JS), African New Dream,

Responsible for the course for 100 students per year, co-author of the course notes.

Mobile Development, African New Dream.

Course manager for 30 students per year, co-author of course notes.

Digital Marketing & Online Business Creation, African New Dream.

Course manager for 50 students per year, co-author of course notes.

Webmaster & Server Administration, African New Dream.

Responsible for the course for 20 students per year, co-author of the lecture notes.

Computer & Office Maintenance, African New Dream

Course manager for 30 students per year, co-author of course notes.

March-November 17 **General Computing**, 1st year BTS, University Institute of Technology and Ethics.

Course leader for 60 students, co-author of course notes.

Database, 1st year BTS, University Institute of Technology and Ethics.

Course creation, in charge of the course, 60 students.

Object-Oriented Programming, 1st year BTS, IUSTE.

Course leader for 20 students, co-author of course notes.

Java and C++ programming, 1st year BTS, University Institute of Technology and Ethics.

Course leader for 20 students, co-author of course notes.

System Programming, 1st year BTS, University Institute of Technology and Ethics.

Supervise exercises and lab work for 20 students.

2015-2017 Introduction to computer science, Assnet, Vocational Training.

Course leader for 15 students, co-author of course notes.

Word, Excel, PowerPoint, Publisher and Access, Assnet, Professional Training.

Course creation, in charge of the course, 50 students.

Computer maintenance for beginners, Assnet, Vocational training.

Course leader for 20 students, co-author of course notes.

Computer Network Database, Assnet, Vocational Training.

Course leader for 20 students, co-author of course notes.

2012-2015 Mathematics, At home, Tutor.

Responsible for the course for more than 100 students, co-author of the course notes.

Physical, At home, Tutor.

Responsible for the course for more than 100 students, co-author of the course notes.

Points forts

Teamwork, proactivity, curiosity, adaptability, flexibility, positive attitude, good communication, ability to work under pressure and learn from new technologies.

Administrative activities

Jan.24 – Now Candidate for the BigDaCi International Conference as a Member, MCCSIS.

2023 – Now Member of the digital marketing team, Robot-CH.

2021 – Now Member of the robotics club, ROSBIOTECH.

2019 – 2021 Member of the robotics club, MGOU.

2018-Now. **Promoter**, African New Dream.

2018 - 2024 Member of the jury and the organizing committee of the defenses, African New Dream.

March-Nov. 17 Member of the organizing committee of the defenses, IUSTE.

2014 – 2017 **President of the IT club, IUSTE.**

2015-2017 Member of the jury and the organizing committee of the defenses, Assnet.

2012-2015 Study manager and member of the organizing committee of the education fair, Batchingou Student

Association (AEEB).

2008 – 2012 Member of the computer club and the drama club, Lycée De Bamena (LyBam).

Qualification Profile

Legend: (+) Basic knowledge; (++) good knowledge; (+++) Very good knowledge

	ROS 2: (++)
	Linux: (+++)
	Yahboom: (+++)
	Raspberry Pi: (+++)
Robotics	Filter from Kalman: (++)
	Robot programming: (++)
	Mobile robotics and manipulators: (++)
	Robotic simulation (Gazebo & Kompas 3D) : (++)
	Robotic Process Automation (RPA): (++)
Artificial intelligence	OpenCV: (++)
	MATLAB: (++)
	Deep Learning: (++)
	Machine Learning: (++)
	Large Language Model: (+)
	Reinforcement Learning: (++)
	TensorFlow & Streamlite: (++)
	Mathematical & scientific calculations: (+++)
	Generative AI (ChatGPT, ChatSonic, & Gemini): (+++)
	C++: (+)
	Kivy: (++)
Development	Python: (+++)
	Html5, CSS3 & JS: (+++)

	Bootstrap & Flask: (+++)
	Three JS & Node JS: (++)
	React JS & React Native: (++)
	WordPress & WooCommerce: (+++)
	Algorithmics & Object-Oriented Programming: (+++)
	ToIP: (+++)
	MS Office: (+++)
	Shell & Virtual Box: (+++)
	Remote PC Control: (+++)
Maintenance & Computer Network	N-Computing & PBX: (+++)
	Modem & Connectors: (+++)
	Servers NOC & Cpanel: (+++)
	OS (Linux, Mac & Windows): (+++)
	Routers, Switches and Converters: (+++)
	Reflective posture: (+++)
	Ethics and Responsibility: (+++)
	Supervision of Learning Activities: (+++)
Teaching & Scientific Research	Context-Appropriate Communication: (+++)
	Adaptation to the Work Environment: (+++)
	Construction and Conduct of Research Projects: (++)
	Design and Evaluation of Teaching that Promotes Learning: (++)
	Teamwork and Network (Possibly in a Management Situation): (+++)
	Dissemination, Transfer and Enhancement of the Knowledge Produced: (++)

Research activities

Awards and distinctions

2024 - Participation in the RCT Olympiad 2024, ROSBIOTECH.

- Participation in the BigDaCi international conference, MCCSIS.
- Candidate for the position of Digital Marketing Manager, Robot-CH.
- Participation in the International Research Olympiad (IRO), SAMYAK SCIENCE SOCIETY.
- Participation in postgraduate lectures on "Perspectives for the development of the scientific activity of modern scientists", *ROSBIOTECH*.
- 2023 Participation in the RCT Olympiad 2023, ROSBIOTECH.
 - Candidate for the position of Digital Marketing Manager, Robot-CH.
 - Participation in the "Open Education in Russian", Ministry of Education of the Russian Federation.
 - Participation in the "OPEN-CALL" for an internship at the innovation center for 2 months, Biryuch IC.
 - Participation in the "Young Scientist" competition on innovations in biotechnology, BIRYUCH IC.
 - Participation in the program of "Training a Community of Young Scientists in the City of Moscow", ROSBIOTECH.
 - Participation in the all-Russian student project "Your Move", the Federal Youth Agency.
 - Participation in the competition named after the first printer Ivan Fedorov "Young Scientist of Russia", the Russian Academy of Engineering (RIA) and the Association of Technical Universities.
- 2022 Participation in the Eurobot2022 competition, Eurobot Association.
 - Participation in the Russian language competition, Ministry of Education and Science of Russia.
 - Timiryazevsk All-Russian Research, Experimentation and Design Competition, Integraciya.
 - Participation au concours « Industrial Mortgage », The National Association of Robotics Market Participants (NAURR).
- Obtaining an academic scholarship of 50% on tuition fees for my PhD, Automation and control of technological processes and production (food in, *Russian University of Biotechnology (ROSBIOTECH)*).
 - Participation in the VII All-Russian Engineering Competition, Moscow Institute of Engineering Physics
 - Participation in the All-Russian Skolkovo Competition, Skolkovo Foundation.
 - Participation in the Skolkovo Foundation competition (VEB. RF Group) and the Rusagro Group of Companies, Skolkovo Foundation.

- 2017 **1st in my Bachelor's class,** Computer engineering *University Institute of Technology and Ethics*.
- 5th national in the Higher Technician Certificate (BTS) in Cameroon, specializing in business information technology, *University Institute of Technology and Ethics (IUSTE)*.

Academic research project

- [2024] Implement the following "ROS2 Humble" projects: Configure the work environment; use the turtlesim, ros2 and RQT; Manage nodes, topics, services, settings, and actions. Use rqt_console to view logs and launch nodes. record and read data; Use colcon to create packages, create workspaces, and packages. write custom publishers, subscribers, services, msg and srv files in C++ and python; Implement custom interfaces. Use ros2doctor to identify problems and parameters in a C++ & Python class. create and use plugins, Russian University of Biotechnology < ROSBIOTECH />.
- [2023] Implement the following "AI & OpenCV" projects: Cats vs Dogs Classification using CNN Keras; image classification; creation of emojis; prompts of ChatGPT for developers; playback of images, videos and webcam; crop and resize images; form and put the texts on an image; manage warp perspectives and attach images; scan documents; Manage the detection of colors, contours, shapes, faces, virtual paintings, and license plates, *Russian University of Biotechnology < ROSBIOTECH />*.
- [2022] Improvement of the autonomous mobile robot with facial recognition; sensor-based mapping and localization; Gaussian mean filtering and median filtering; OpenCV image pixel reading and display operation; KNN, CNN and SVM recognition of handwritten numbers; image restoration; brightness enhancement, skin whitening, image: zoom, cut, offset, mirroring, affine map and rotation, perspective transformation, color image histogram and equalization, *Russian University of Biotechnology < ROSBIOTECH />>*.
- [2021] Realization of an autonomous mobile robot with facial recognition controlled by a Raspberry Pi 4B; Raspberry Pi system entry method; Remote transfer file; Linux commands and Vim editor; Raspberry Pi system backup; Wiring Pi Library Wi-Fi connection; Serial port communicates with external devices; Color_LED; advance; Car Run; ServoControlColor, KeyScanStart; Infrared_avoid, infrared_follow, follow-up, avoid_ultrasonic, servo_avoid_ultrasonic, Bluetooth_control, TCP_control, Servo_control, PS2_control, Moscow Regional Moscow Regional University < MGOU />.
- [2020] Simulation of an LED, flashing, button, switch, lighting control panel, massive optimization, FTP server, Torrents and home theater with Raspberry Pi. Create a landing page, LED remote, feedback, weather phidget, planning and AutoStart with Raspberry Pi, *Moscow Regional Moscow Regional University* Moscow Regional University <a href="Mo
- [2019] Simulation of an example of Harris corner detector, a particulate filter, location types, recursive filter and Kalman, SLAM and EKF Mapping, *Moscow Regional Moscow Regional University < MGOU />.*
- [2018] **Completing mini-projects with Sonic:** Haunted Bells; pentatonic beeps; Tron Bikes; Rhythm Wob; Ocean waves; IDM Breakbeat; Acid walking, *Tver State Polytechnic University < TSPU />.*
- [2017] **Project achievements with Scratch:** Weightlessness Space Game; Water Use Calculator; Username generator; Turtle Tracker; Tree Life Simulator; Technological toys; Synchronized *University Institute of Technology and Ethics < IUSTE/>*.

The full list of my academic research is available at: https://roding.africannewdream.fr/research-activities. Conference

- [March 2024] Theme: "The XII All-Russian Congress of the SMU and SSS", Integraciya, Moscow-Russia.
- [Oct 2023] Theme: « Your Move, Federal Youth Agency (Rosmolodezh) », Moscow-Russia.
- [May 2023] **Theme:** "Information Technology in Civil Engineering, the Association "Digital Innovations in Mechanical Engineering" (ACIM) and the publishing house CONNECT», Moscow-Russia.
- [April 2023] Theme: "Science of the Future Science of Youth, VIII All-Russian Forum", Moscow-Russia.
- [Dec 2022] Theme: "Sirius Young Scientists Congress", Integraciya, Moscow-Russia.
- [Nov 2022] Theme: "The XIII All-Russian Youth Forum "APK YOUTH, SCIENCE, INNOVATION", Integraciya.
- [Sep 2022] **Theme:** "All-Russian Scientific and Technical Conference "INFORMATION AND AUTOMATION IN THE FOOD INDUSTRY", *Russian University of Biotechnology, Moscow-Russia.*
- [May 2022] **Theme:** "Industry 4.0 in Russia: Technologies, Materials, Implementation Experience", Association for the Support of Scientific Research (Barnaul, Russia), Moscow-Russia.
- [Feb 2022] **Theme:** "The 1st Scientific and Practical Conference of Young Scientists "Science of the Future" dedicated to the Day of Russian Science", Russian University of Biotechnology, Moscow-Russia.
- [Dec. 2021] **Theme:** "Food Security: Scientific, Personal and Informational Support", *Voronezh State University of Engineering Technology (VSUET)*, Voroney, Russia.

- [Sep 2021] **Theme:** « Scientific and practical conference of young scientists « Chemical technology. Biotechnology. Ecology: pathways to integration", *Russian University of Biotechnology, Moscow-Russia.*
- [April 2021] **Theme:** "International Scientific Conference of Young Researchers (Science at the Service of Humanity 2021)", *Moscow State Regional University (MGOU), Moscow-Russia*.
- [Nov. 2020] **Theme:** "Current Issues and Development Trends in the Field of "Technology": Proceedings of the Second International Scientific and Practice Conference, *Limited Liability Company (OntoPrint), Moscow-Russia.*
- [Dec. 2018] **Theme:** "IT Night", *EPAM Tver, Tver-Russie.*
- [April 2017] **Theme:** « National Exhibition of Scientific Research and Innovation in Cameroon, Ministry of Higher Education (MINESUP) », Yaoundé-Cameroon.
- [Feb. 2017] **Theme:** "6th edition of the International Exhibition of Companies, SMEs and Partnerships (PROMOTE), Cameroonian Ministry of Trade (MinCom)», Yaoundé-Cameroon.

Popularization/General Public

- [Feb. 2024] **Theme:** "Perspectives for the development of the scientific activity of modern scientists", *Russian University of Biotechnology < ROSBIOTECH/>, Moscow-Russia.*
- [Dec 2023] Theme: "Formation of a Community of Young Scientists of the City of Moscow", Moscow City Department of Science and Education, Moscow-Russia.
 Theme: Visiting School for Students and Postgraduates, Moscow City Department of Science and Education», Moscow-Russia.
- [Sep 2023] **Theme:** "General Assembly with Graduate Students", Russian University of Biotechnology < ROSBIOTECH/>, Moscow-Russia.
- [Feb 2023] **Round table:** "Priority 2030 Expert Group on Academic Leadership", *Russian University of Biotechnology < ROSBIOTECH />, Moscow-Russia*
- [Jan 2023] **Round table:** "International Cooperation in the Field of Biotechnology and Health Care: Perspectives and Ways of Interaction between Young Scientists from Russia and Kazakhstan", *Russian Biotechnology University "ROSBIOTECH", Moscow-Russia.*
- [Oct 2022] **Theme:** "Chemical technology. Biotechnology. Ecology: pathways to integration", *Russian University of Biotechnology < ROSBIOTECH />, Moscow-Russia*.
- [March 2022] **Theme:** "Automated control systems for biotechnological processes", *Moscow State University of Food Production (MGUPP), Moscow-Russia.*
- [Jan 2022] **Round table:** "Conference in the context of continuing education. Students and the scientific and innovative world", *Moscow State University of Food Production, Moscow-Russia.*
- [Nov 2021] **Theme:** "The role of scientific journals in the development of scientific communication", *Russian University of Biotechnology < ROSBIOTECH />, Moscow-Russia.*
- [Oct. 2021] **Theme:** "The Role of Data Repositories and the Problem of the Ethics of Their Use", *Russian University of Biotechnology < ROSBIOTECH/>, Moscow-Russia*.
- [Feb 2020] **Theme:** "Design and intensive teaching of the schools of the future", *Moscow State Regional University (MGOU) and STI 20.35 University, Moscow-Russia.*
- [Dec. 2019] **Theme:** "Future trends and new technologies for business and entrepreneurship development in Moscow and the region", *My company in Moscow (MBM), Moscow-Russia.*
- [Nov. 2019] Theme: "New economic evolution of the world", Young Make Difference, Moscow-Russia.
- [Oct. 2019] Theme: "Russia-Africa Cooperation", Roscongress, Sotchi-Russia.
- [Jan 2019] Theme: "Business and Networking Lunch", Founding Institute, Tver-Russia.
- [Sep 2018] **Theme:** "Creation of a collaborative work platform between young Cameroonian entrepreneurs", *Académie des start-up, Yaoundé-Cameroon.*
- [Sep 2017] **Theme:** "How to succeed in your socio-professional integration after your higher education", *University Institute of Science, Technology and Ethics (IUSTE), Yaoundé-Cameroon.*
- [Sep 2016] Theme: "How to protect yourself from hackers", Smart Hacking School, Yaoundé-Cameroun.
- [August 2016] Theme: "How to do network marketing in Africa", Kmer trading, Yaoundé-Cameroon.
- [Sep 2015] **Theme:** "How to prepare your academic year to better succeed in your higher education", *University Institute of Science, Technology and Ethics (IUSTE), Yaoundé-Cameroon.*

Complete list of my conferences and popularizations: https://roding.africannewdream.fr/conferences.

Webinar [Replay]

- [May 2024] **Theme:** Cobotics in logistics and supply chain, *Universal Robots, Danemark, https://video.universal-robots.com/la-cobotique-dans-la-logistique-et/46accaea82db113823f4/room.*
- [March 2024] **Theme:** Cybercriminal robot portrait, *Valais Chamber of Commerce and Industry The Ark Foundation, Switzerland, https://youtu.be/P0f3_usR120.*
- [Jan 2024] **Theme:** Webinar-Cobots for Packaging and Palletizing, *Valais Chamber of Commerce and Industry The Ark Foundation, Switzerland, https://events.universal-robots.com/semea/fr/online-events/webinaire-cobots-pour-l-emballage-et-la-palettisation.*
- [Dec 2023] **Theme:** Cybersecurity and Artificial Intelligence: robots and ants, *Cybersecurity, Finland, https://webikeo.fr/webinar/cybersecurite-et-intelligence-artificielle-des-robot-et-des-fourmis-2.*
- [Sep 2023] Theme: Development of an autonomous robot, Jefferson & Wells, Belgium, https://youtu.be/bGy6-htBKkl.
- [July 2023] **Theme:** The different concepts encountered in robotics, *Jefferson & Wells, Belgium* https://youtu.be/oY7BXZcf2Yw.
- [May 2023] **Theme:** How to optimize your industrial activities with innovative robotic solutions? *EQUANS France, France, https://youtu.be/adLqR-s2Qlw.*
- [March 2023] **Theme:** Profiling and configuration of a professional photo printer, *Epson Russia*, *Russia* https://youtu.be/c7kug4x-fQ4.
- [Jan 2023] **Theme:** Calls for projects, ANR, Defense Innovation Agency & Ile-de-France Region BPI, France, https://youtu.be/Cqc5pTO r0k.
- [Dec 2022] **Theme:** Virtual reality, augmented reality and robotics, *Clarity, Solutions & Co and Technical Engineering, France, https://youtu.be/Rtt1-YmV7Zs.*
- [Sep 2022] **Theme:** Testing with a robot? Yes, but why? La Taverne du Testeur, France, https://youtu.be/b2h6VOXFkbc.
- [July 2022] **Theme:** Self-driving car technology: when will robots hit the road? *Schaffhausen Institute of Technology, Switzerland,* https://youtu.be/7Am4WS7x_Sw.
- [May 2022] **Theme:** HOW TO BE ANONYMOUS? Introduction to the Web, *Engineers Without Borders, India,* https://youtu.be/2wDS3pYhTrU.
- [March 2022] **Theme:** Minimally invasive robotic-assisted surgery in IDF, *Digital Pedagogy in Health, France,* https://youtu.be/eN5kW9QGXH8.
- [Jan 2022] **Theme:** Mobile robotics at the service of order pickers: what are the concrete benefits? *Savoye Supply Chain Solutions, France, https://youtu.be/oO4GcLF8inQ.*
- [Dec. 2021] **Theme:** 3D printing and robotics: technologies and applications, *PROXINNOV Robotics & CYLAOS*, France, https://youtu.be/rGOqiFu2bpk.
- [Sep 2021] **Theme:** Omron TM collaborative robots, *ERM and Omron Automation Robotics Solutions Americas, France, https://youtu.be/3B7CG7TQRag.*
- [July 2021] **Theme:** Robotics in Laboratory Automation, *Mechanical Robotics, Canada,* https://youtu.be/n6g09qVogJA.
- [May 2021] **Theme:** All and robotics Ensuring intelligent automation in the supply chain and logistics, *GeekPlus Logistics & Warehouse Automation, USA, https://youtu.be/p1VDS4Yz558*.
- [March 2021] Theme: Anyone can teach robotics, VEX Robotics & EDMODO, USA, https://youtu.be/oTSbPwn8PEc.
- [Jan 2021] **Theme:** Doosan Robotics collaborative robots and secure integration of cobots, *Huma Robotics, France, https://youtu.be/3dnBMZkd_AQ*.
- [Dec. 2020] Theme: Work in a robotics start-up, HausBots, United Kingdom, https://youtu.be/SIZxmXRm2LU.
- [Sep 2020] **Theme:** Basics of robotics and new technologies, *Automation and Robotics, India,* https://youtu.be/V4xmB25_NBc.
- [July 2020] **Theme:** Entrepreneur in the storm, prepare for the rebound now, 60 000 rebonds & Mutual Harmony, France, https://youtu.be/BcvZ2MnGHxQ.
- [May 2020] Theme: How to Teach Robotics and ROS Online, The Construct, Spain, https://youtu.be/ygh6oean95k.
- [March 2020] **Theme:** How to create a course for The Robot Ignite Academy #82, *The Construct, Spain,* https://youtu.be/KKYsJNsB4bE.
- [Jan 2020] **Theme:** ROS Developers LIVE Class #79: Using NVIDIA Jetson Nano with ROS, *The Construct, Spain,* https://youtu.be/-5CeeMZx3jQ.

The full list of my webinar is available at the following link: https://roding.africannewdream.fr/webinars.

Online Further Education

[Jul.-Now] ROS 2-Humble Documentation, OSR Foundation, https://docs.ros.org/en/humble/index.html.

[Apr.-June 24] Mobile Robotics (Course), ENSTA-Bretagne, https://play.google.com/books/reader?id=4g5mDwAAQBAJ&pg=GBS.PP1&hl=fr.

[Jan.-Mar. 24] Reinforcement Learning, Google DeepMind, https://youtube.com/playlist?list=PLqYmG7hTraZDVH599EItlEWsUOsJbAodm&si=4nisxFQ3GfbJEmyl.

[Oct.-Dec. 23] Deep Learning Specialization, DeepLearning.ai, https://www.deeplearning.ai/courses/deep-learning-specialization.

[July-Sept. 23] Learn OpenCV, Computer Vision Zone, https://www.computervision.zone/course-list/

[April-June 23] Learn Generative AI, DeepLearning.ai, https://www.deeplearning.ai/short-courses.

[Jan.-Mar. 23] RL with TensorFlow, Google TensorFlow, https://www.tensorflow.org/agents/overview?hl=fr.

[Oct.-Déc. 22] KALMOOC, ENSTA-Bretagne, https://www.ensta-bretagne.fr/jaulin/kalmooc.html.

[July-Sept. 22] Mobile Robot, University of Montpellier, https://www.youtube.com/@AndreaCherubini/videos.

[April-June 22] Python3 for robotics, Theconstructsim, https://app.theconstructsim.com/Course/58/.

[Jan.-Mar. 22] Linux for robotics, Theconstructsim, https://app.theconstructsim.com/Course/40/

[Oct.-Dec. 21] Deep Learning Training, Machine Learnia, https://youtube.com/playlist?list=PLO_fdPEVIfKoanivTJblbd9V5d9Pzp8Rw.

[July-Sept. 21] Python for Machine Learning, Machine Learnia, https://youtube.com/playlist?list=PLO_fdPEVIfKqMDNmCFzQISI2H_nJCEDJq.

[April-June 21] Introduction to Machine Learning, Machine Learnia, https://youtube.com/playlist?list=PLO_fdPEVIfkqUF5BPKjGSh7aV9aBshrpY.

[Jan.-March 21] Python developer, Udemy, https://www.udemy.com/course/developpeur-python-formation-complete/.

 $[Oct-Dec\ 20] \ \textbf{Get\ started\ with\ Linux}, \textit{OpenClassrooms}, \\ \underline{\textit{https://openclassrooms.com/fr/courses/7170491-initiez-vous-a-linux}}.$

[Jul-Sep 20] Learn how to use the command line in a terminal, OpenClassrooms,

<u>https://openclassrooms.com/fr/courses/6173491-apprenez-a-utiliser-la-ligne-de-commande-dans-un-terminal.</u>
[April-June 20] React JS, Grafikart, https://grafikart.fr/formations/react.

[Jan.-Mar. 20] Learn JavaScript: Complete JavaScript Course, Udemy, https://www.udemy.com/course/cours-javascript/.

[Oct-Dec 19] Manage code with Git and GitHub, OpenClassrooms, https://openclassrooms.com/fr/courses/7162856-gerez-du-code-avec-qit-et-qithub.

[Jul-Sep19] Creating games with Python, The MagPi, https://magpi.raspberrypi.com/books/essentials-games-vol1.

[Apr-Jun 19] The official Raspberry Pi beginner's guide, the MagPi, https://magpi.raspberrypi.com/books/beginners-guide-4th-ed.

[Jan.-March 19] Introduction to Mobile Robotics, University of LAVAL, https://www.piloter.org/. [Jul-Dec 18] How to Run a Business, Pilot, https://www.piloter.org/.

[Jan-Jun 18] How to Start a Business, Create My Business Plan, https://www.creer-mon-business-plan.fr/.

In-person Further Education

[Sept. 18-Jul 19] Diploma in Russian Language, Tver State Polytechnic University, Tver, Russia.

[Dec.17-May 18] Diploma in English Language (TOEFL), SDS-Center Institute, Yaoundé, Cameroon.

[Sept.13-Jul. 14] **Certificate of Professional Qualification in the Naval Telecommunications Specialty**, Schools of Maritime Science and Technology (ESTMA), Douala, Cameroon.

[Sept. 12-Jul. 13] Faculty of Science. Physics option, University of Yaoundé 1 (UY1), Cameroon.

The complete list of my additional training is available at: https://roding.africannewdream.fr/education.

Supervision

Supervision of Bachelor's students

- [2024]
- Framing (100%) by Marie ELOUNDOU: Development of the Zoom clone, 03 Html5 Template and a Telegram bot to upload the videos to YouTube. Student in the 2nd year of the master's cycle, IRIS Higher School of Computer Science, in France, 3 months.
- **Supervisor (100%) of Désirée POSSI:** Realization of a Machine Learning model for the classification of iris flowers, and to caricature an image. *Student in the 2nd year of the Master's cycle, IUGET, in Germany, 3 months.*
- **Supervisor (100%) of Lynn TEIFOUET:** Student in the 1st year of the BTS cycle, IUGET, in Cameroon, **in progress**.
- [2023]
- Framing (100%) by Marie ELOUNDOU: Development of the Candy Crush Game, 03 Html5 Template and a web application to upload videos to YouTube and images to the web. Student in the 3rd year of the engineering cycle, IT School, in France, 3 months.
- **Supervisor (100%) of Rodrigue NDIFOR:** Development of a music player application (audio & video) in React JS. *Student in 1st year of the bachelor's cycle, Giddis Computer Training Center, in Cameroon, 1 month.*

- **Supervisor (100%) of Greyson NKWENGE:** Development of a "Camera Puzzle" game in React JS that integrates the webcam in an instant way. *Student in the 1st year of the bachelor's degree, Giddis Computer Training Center, in Cameroon, 1 month.*
- [2022] Framing (100%) from Tatiana WODJOU: Creation of an Instagram bot and a localization program with Python, writing of an e-book on python programming at the beginner level, creation of the "AND-Consulting" website and the "AND-App" website. Student in the 3rd year of the engineering cycle, IT School, in France, 3 months.
 - **Supervisor (100%) of Elvis TIOMATSA:** Realization of a mobile quiz application, writing of an e-book on Python programming at the professional level, creation of an e-learning and e-commerce site for African New Dream. *Student in the 3rd year of the engineering cycle, IT School, in France, 3 months.*
 - **Supervisor (100%) of Marie ELOUNDOU**: Creation of a simple and scientific calculator in Html5, Css3 & JavaScript, writing of a beginner-level e-book on Html5, Css3 & JavaScript, creation of the African New Dream portfolio site, and the "All4-Students" site. *Student in the 3rd year of the engineering cycle, IT School, in France, 3 months*.

Supervision of Bachelor's students

[2019] **Co-Supervisor (50%) of Annick TCHIENGWA, with Mr. Jacques TANJY TANJY (50%):** Design and development of a PC application for note management. Student *Bachelor's degree level 3 in software engineering, University Institute of Technology and Ethics, Cameroon, 3 months.*

Supervision of students of the Higher National Diploma (HND)

- Supervisor (100%) from: Lionel YAKAM (Development of an educational search engine platform for primary and secondary schools), Brandon KAFACK (Development of an educational search engine platform for universities), Alex MBÉMI (Development of a job offer site in Cameroon), Nelson KOUOGANG (Development of a website for renting goods and services), Hervé DONMESSA (Development of an entertainment website), Michelle ELOUNDOU (Development of a Buy and Sell website), Lucresse SONKENG (Deployment of the telephone over Internet Protocol (ToIP)), Grace TCHEPGNIE (Development of a digital directory website)"Honey, I know. (Development of a digital address book website), DIPANDA (Development of an e-commerce site), and MASSO (Development of an online medical consultation site). BTS level 1 students in computer management, University Institute of Technology and Ethics, Cameroon, 3 months.
- Supervisor (100%) from: Annick TCHIENGOUA (Development of a web/PC application for note management), Philomène ATANGANA (Development of web/PC applications for absence management), Junior DONGMO (Development of a web/PC application for course management Hippolyte NGUELA (Development of web/PC applications for schedule management), Franck NOUMEDEM (Development of web/PC applications for library management), Leticia TALLA (Development of web/PC applications for classroom management), and Yves YONTSEM (Development of web/PC applications for payroll management). BTS level 1 students in computer management, University Institute of Technology and Ethics, Cameroon, 3 months.

The full list of supervised students is available at: https://roding.africannewdream.fr/supervised-work.

Supervised professional work

[2024] - Supervisor (100%) of AI Developers: Nadège MEGUEGHO.

Company & Duration: African New Dream, <06 months />.

Completed projects:

Caricature an image with machine learning.

Supervisor (100%) of WordPress & Web Developers: Ahmed WOUNGANG, Frank KEMAYOU,
 Manuela NYA, Steve TEJIOGUE, Donald KAMDEM, Marius NGAMENI, Junior TONLEU, Sinclair

Kouatchi, Nadge Meguegho, Bobet Batchanga & Loras Nana.

Company & Duration: African New Dream, <06 months />.

Web applications developed:

AfricanNewDream.org, QR-Code Generator, Html Template [10],

Video games made:

Who wants to win the millions.

Website developed:

AND-Digital, Nadegda Services, Campus Russie, El Multi-Services, African New Dream <redesign/>, Portfolio Elise AZAR, Schengen Campus, KOUASOLEL Consulting, Marie Couture, GREGOA, Financial Crypto Authentic Bank <redesign />, PIAMSERVICES, Oil Marine Surveys Terminal, KOUASOLEL Consulting, IDFZ-<redesign />, SIP Engineering.

Community Management:

P&M Services, P&M Tech, El Multi-Services, PiamServices, SIP Engineering.

- Supervisor (100%) of the Community Managers: Valdo SEUWA, Ginette NGOUDJOU, Jirella SOUADATOU, Blondelle KEUFACK & Mlle NFOR Cyrielle,

Company & Duration: African New Dream, Batchingou.Net, Save Travel Group, Kouasolel Consulting, Schengen Campus, Russia Campus, <06 months />.

Tasks performed:

Implementation and management of the Digital Marketing strategy, Community Management, Copywriting, Webmaster, Infographics, Content Marketing, Web Marketing, Inbound Marketing, Social Marketing, Collaboration Dossier and Cooporate Marketing.

[2023] - Supervisor (100%) of Web Developers: Désirée POSSI, Ryan JOSHUA & Stanley WANDJI.

Company & Duration: African New Dream, <10 months/>.

Completed projects:

Template Html [06], Brick Game, PinPong Game, Sudoku Game, Tetris Game, Ticking Game Toe, AND-Paint, Application of: Stopwatch, Language Translation, Currency Conversion.

- Supervisor (100%) of WordPress Developers: Nazer YEPDO & Junior TONLEU

Company & Duration: African New Dream, < 10 months/>.

Website developed:

RODING i-Tech, School RODING i-Tech, PiamServices, Pharmedico-Gaz, Group KEPNGA, Bonbon Sunday, P&M Services, AND-Print; Miss Elise Azar's Portfolio, P&M Tech & Campus Schengen.

- Supervisor (100%) of the Community Managers: Valdo SEUWA, Ginette NGOUDJOU and Miss Jirella SOUADATOU

Company & Duration: African New Dream, Batchingou.Net, Save Travel Group, < 10 months/>. **Tasks performed**:

Implementation and management of the Digital Marketing strategy, Community Management, Copywriting, Webmaster, Infographics, Content Marketing, Web Marketing, Inbound Marketing, Social Marketing, Collaboration Dossier and Cooporate Marketing.

[2022] - Supervisor (100%) of the AI Developers: Ricardo OKE & Leslie TEKEU.

Company & Duration: School 55, < 3 months/>.

Completed projects:

Atari, Finger Counter, and Perform Object Detection using YOLO v5.

 Supervisor (100%) of Web Developers: Désirée POSSI, Miriam NANTCHA, Stanley WANDJI & Steve ABOA & Orgelle LUMBU

Company & Duration: African New Dream, School 55 < 10 months/>.

Completed projects:

Html Template [04], Shooting Game, Simple Calculator, & Scientific Calculator.

- Supervisor (100%) of WordPress Developers: Bernold TEKEU, Justin MADZOU, Leticia THE LORD and Rosine ASSOGO

Company & Duration: African New Dream, < 10 months/>.

Website developed:

KEM Construction, AND-Print, RODING Portfolio, AND-E-com, Financial Crypto Authentic Bank, Pharmedico-Menus, German Solar Academy, University of Yaoundé 2.

- Supervisor (100%) of Community Managers: Rosine ASSOGO, Hervé DONMESA, Bobette BATCHANGA, Fabrice, KAKAM, Arsène PANTA, Caroline NGONO, Yannick EBA, Marina SIMO, Gédéon NGOMBE.

Company & Duration: African New Dream, JPN Immigration, Immigration Bellevie, Eco Plus Nettoyage & All4Student, < 10 month />.

Tasks performed:

Implementation and management of the Digital Marketing strategy, Community Management, Copywriting, Webmaster, Infographics, Content Marketing, Web Marketing, Inbound Marketing, Social Marketing, Collaboration Dossier and Cooporate Marketing.

[2021] - Supervisor (100%) of the WordPress Developer: Rosine ASSOGO

Company & Duration: African New Dream, < 10 months/>.

Website developed:

GFS-Plus, Eco Plus Nettoyage, Eco Plus Shop, Afrik Picture, African New Dream Services, Rosine Assogo Consulting.

- Supervisor (100%) of the Community Manager: Rosine ASSOGO, Bobette BATCHANGA, Fabrice KAKAM & Arsène PANTA.

Company & Duration: African New Dream, JPN Immigration, Immigration Bellevie, Eco Plus Cleaning < 10 months/>.

Tasks performed:

Implementation and management of the Digital Marketing strategy, Community Management, Copywriting, Webmaster, Infographics, Content Marketing, Web Marketing, Inbound Marketing, Social Marketing, Collaboration Dossier and Cooporate Marketing.

[2020] - Supervisor (100%) of the Managers & Team Leaders: Rosine ASSOGO, Winnie MANYO and Martial NGOUNOU

Enterprise & Duration: African New Dream, < 10 months/>.

Tasks performed:

Drafting of the business plan for "RODING i-Tech" and "School Online"; Business Writing plan and the project funding application file: Afrik Picture, Kilos Disponible, Sweet Travel, PiamWater, PiamBeauty, PiamGrace, African School, Know Your Village, PiamConsulting, and e-doctor.

- Supervisor (100%) of the Community Managers: Valdo SEUWA & Samuel EVA.

Enterprise & Duration: African New Dream, < 10 months/>.

Tasks performed:

Implementation and management of the Digital Marketing strategy, Community Management, Copywriting, Webmaster, Infographics, Content Marketing, Web Marketing, Inbound Marketing, Social Marketing, Collaboration Dossier and Cooporate Marketing.

The list of supervised professional work is available at: https://roding.africannewdream.fr/supervised-work.

Publications

International newspapers

[IN.1] Ngongang R.D., Élise AZAR M., Potential challenges to the use of mobile robots in the cities of Yaoundé and Douala in Cameroon. *In progress. 9th International Conference on Big Data Analytics, Data Mining, and Computational Intelligence, BigDaCi.*

National newspapers

- [NN.6] Ngongang R.D., Blagoveshchenskaya M.M. Robot in space: Al in space could revolutionize earth observation. *Moscow, May 7, 2023. Russian University of Biotechnology "ROSBIOTECH". CDU 621.311.25:621.039.*
- [NN.5] Ngongang R.D., Blagoveshchenskaya M.M. Cobots: between automation and job loss. *Moscow, May* 7, 2023. Russian University of Biotechnology "ROSBIOTECH". CDU 65.011.56.
- [NN.4] Ngongang R.D., Blagoveshchenskaya M.M., JILENKOV P.A., V.A. KASATKINE, LOZININA K.V. Increasing the efficiency of the food industry through the integration of artificial intelligence into the production chain. Factory of the future: transition to advanced and intelligent digital production technologies, robotic systems for the food industries. Collection of scientific reports of the IV International Conference and Specialized Exhibition. Moscow, 2023. Russian University of Biotechnology "ROSBIOTECH". P. 305-313.
- [NN.3] Ngongang R.D., Malikov A.B., Bakaeva K.V. and Veiberov A.V. Psychology at the service of robotics. Newspaper Eurasian Space: Economy, Law, Society, Z.N. Vaneev under the President of the Republic of South Ossetia", Editorial Board of the International Scientific and Analytical Journal "Eurasian Space: Economy, Law, Society", No: 4 (August), 2022. P. 32-33, ISSN: 2687-1084.

- [NN.2] Ngongang R.D. Modernization of the training of future technology teachers in the field of neural network programming. Current Issues and Development Trends in the Field of Technology: Proceedings of the II International Scientific and Practice Conference, Moscow, March 26, 2021 / Rep. editor M.G. Koretsky, comp. N.P. Shpakov. Moscow: Limited Liability Company "OntoPrint", 2021. P. 126-128.
- [NN.1] Ngongang R.D. Development of autonomous intelligent control systems for mobile robotics. Current Issues and Trends in the Development of the Field of Technology: Collection of Materials of the II All-Russian Online Scientific and Practical Conference, Moscow, November 13, 2020 / Moscow: Limited Liability Company "OntoPrint", 2020. P. 105-108.

Book chapters

- [BC.4] R.D.'S, Blagoveshchenskaya M.M., Blagoveshchensky V.G., ZELENOVA E.N., ZUEVA Y.V. Cobots: New technologies to automate the technological processes of manufacturing various products. ROGOV LECTURES: collection of reports of a scientific and practical conference with international participation. Kursk, 2023. Closed Joint Stock Company "University Book". P. 292-300
- [BC.3] Serykh I. N., Bannikova O.A., <u>Ngongang R. D.</u>, and R Assago Aboa R. V. Structure of the XML format of the project for IEC 61131-3. Factory of the future: Transition to advanced and intelligent digital production technologies, robotic systems for the food industries. Collection of scientific reports of the III International Specialized Conference exhibition. Kursk, 2022. JSC "University Book". P 6-13.
- [BC.2] Blagoveshchenskaya M.M. et <u>Ngongang R.D.</u> Structure of the project XML format for IEC 61131-3. Information and automation in the food industry. Collection of scientific reports of the All-Russian Scientific and Technical Conference. Kursk, 2022. JSC "University Book". P. 109-115
- [BC.1] Blagoveshchenskaya M. M., Ngongang R.D. et Blagoveschensky I.G. Advantages and disadvantages of robotic manipulators for the food industry. Information and Automation in the Food Industry: Collection of Scientific Reports of the All-Russian Scientific and Technical Conference. Kursk, 2022. JSC "University Book". P. 115-119.

$\textbf{The full list of my publications is available at:} \underline{\texttt{https://roding.africannewdream.fr/scientific-publications}}.$

Dissertations

- [D.4] <u>R.D. Ngongang.</u> Software and algorithmic support for intelligent technology manipulator control systems for food labeling. Ph.D. thesis, Russian University of Biotechnology "ROSBIOTECH", Moscow, Russia, *in progress*.
- [D.3] R.D. Ngongang. Training of specialized skills of pedagogical university graduates in the field of neural network programming. Master's thesis, Moscow Regional Moscow Regional University "MGU", Moscow, Russia, **July 2021**.
- [D.2] <u>R.D. Ngongang</u>. Automation of teaching: the case of the University Institute of Technology and Ethics. Bachelor's report, University Institute of Technology and Ethics "IUSTE", Yaoundé, Cameroon, July 2017.
- [D.1] <u>R.D. Ngongang. Design and development of a web application for the management of registrations and grades: Case of the University Institute of Technology and Ethics. BTS report, University Institute of Technology and Ethics "IUSTE", Yaoundé, Cameroon, **April 2016**.</u>

Linguistics Competence

- French: Reading & Writing (C2).
- English: Reading & Writing (C1).
- Russian: Reading & Writing (B2).
- German: Reading & Writing (A1).
- Batchingou: Mother Tongue.

Leisure

- Draughts games.
- Dance & Music.
- Tourism & Reading.
- Sport: Yoga, Football & Volleyball.
- Continuing education in Robotics and Al.

Portfolio

- My portfolio: https://roding.africannewdream.fr.
- My LinkedIn: https://www.linkedin.com/in/rodingit.
- My YouTube Channel: https://www.youtube.com/@roding-itech/videos.

References

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