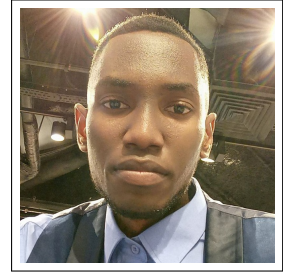


Daglox Kankwanda

Curriculum vitae



Personal Information

| | |
|--------------------|---|
| Mail | dagloxxkankwanda@gmail.com |
| Institution - Mail | D.D.Kankwanda@stud.mospolytech.ru |
| Mobile/WhatsApp | +7 9776586145 |
| Github | github.com/DanGIChris |
| Linkedin | Daglox Kankwanda |
| Date of Birth | 06.06.1998 |

Education

| | |
|-------------|--|
| 2020 - 2024 | B.Sc. Electrical and Power Engineering , <i>Faculty of Urban Studies and City Management</i> , Electrical Engineering and Industrial Electronics, Moscow Polytechnic University, Moscow, Russia |
| 2019 - 2020 | Language Learning program , <i>Preparatory department of Russian Language</i> , Russian Language Moscow Polytechnic University, Moscow, Russia |
| 2017 - 2019 | Pre-Engineering , <i>Preparatory Class for University Entrance Examination</i> Univerité de Kinshasa, Kinshasa, Democratic Republic of Congo |
| 2013 - 2016 | Diploma. Sc Mathematical physics Groupe Scolaire du Mont-Amba I, Kinshasa, Democratic Republic of Congo |

Skills

Stack/Tools

| | |
|------------------------------|--|
| ARM cortex-Mx | GNU-ARM-Toolchain, AVR, ATMEGA32 |
| LL-Protocols | UART/USART, I2C(TWI), SPI, ADC |
| Front-end Dev | Angular, Foundation |
| Back-end Dev | Node.js, Spring Boot, Apache, Maven, JSF, Django, Gradle |
| Sc/Eng Computing Tools | Matlab, WolframAlpha, GeoGebra |
| Machine Learning | PyTorch, Scikit learn, OpenCV2, tensorflow2, tf.lite, nltk, Bertopic |
| Database | SQLite, MS-Access, JDBC, postgresSQL |
| Industrial Automation | SCADA, TIA Portal, DriveLab |
| CI/CD | Github Actions, TravisCI |
| PCB-layout/Scheme/simulation | Altium Designer, FluidSim, Proteus, EasyEDA, Matlab/Simulink |
| CAD | Autocad, Fusion360, Inventor, SolidWorks, Compass |
| Graphic Design | Blender, Illustrator, Figma, AdobeXD |
| Version Control | Git, Github |

| | |
|-----------------|--|
| Task management | Slack, Notion |
| OS | Mircrosoft Windows, Android, Linux(Ubundu, Fedora, Kali), Notion |

Programming Languages/Libraries/Frameworks

| | |
|--------|---|
| Java | Spring boot, javaFx, OpendJdk, apache-tomcat, Hibernete, J2E, mysql-connector, Maven, SceneBuilder... |
| Python | Transformers, Pandas, numpy, Matplotib, plotly, bertopic, nltk, XML/Json RPC, Flask, google, spicy, scrapy, rosserial, selenium, twine, Redis, flask-restful, scrapy/spiders, BeautifulSoup, paramiko, socket, twine, ipython, virtualenv, Sphinx |
| C/C++ | FastLED, Adafruit_SSD1306, linux-kernel, network, POSIX, RPC, sockets, TinyML |
| Others | NinjaScript, Batch, CMake, Dart JSON, Latex, Matlab, Powershell, SQL, liberty Basic, HTML/CSS/SCSS/JS |

Languages

| | |
|---------|------------------|
| French | Native Language |
| Lingala | Native Language |
| English | Foreign Language |
| Russian | Foreign Language |

Experience

Accademic Work Projects

09/2022 - 12/2022 **Control System Engineer & Computer Vision Specialist - Student**, *Laboratory of Robotics Moscow Polytechnic University*,
Autonomous Transport Systems Project [Ressources](#) With [Maxim Arkhipov](#) and [Lada Matrosova](#), Moscow, Russia

In this project, I worked as part of a team to continu the development of the autonomous transport system capable of transferring cubic objects from the ground to a designated location where they would be picked up by a drone. As part of an university project, I was assigned to these following responsibilities:

- Code the control logic to maneuver a robotic crane (x, y, z axes movements) with an electromagnet actuator to pick up objects
- Program the activation and deactivation of the electromagnet to grip and release objects
- Code the object conveyor belt, escalator, and launching mechanisms using Raspberry Pi GPIO
- Rewrite functions to optimize crane and transport component movements
- Create a continuous loop system to pick up objects, transport them through various stages, and deliver them to the drone pad
- Implemented OpenCV algorithms for real-time object detection and center point identification through a camera feed

Skills Used:

- Troubleshooting - diagnosed and repaired various sensors and mechanisms
- Python - for overall system programming and RPi GPIO control
- OpenCV - for computer vision and object detection
- RPi GPIO - for interfacing with and controlling sensors and hardware
- System optimization - rewrote functions for smoother component movements
- Collaborative problem-solving and teamwork

Outcomes:

- Gained valuable experience in robotic manipulations, object transport mechanisms, computer vision, and Python/RPi programming
- The system can successfully identify, pick up, and transport a variety of objects to the drone pad autonomously

- 03/2022 - 06/2022 **Software and Control System Engineer - Student**, *Laboratory of Flying Robotics COEX (COPTER EXPRESS)* - Moscow Polytechnic University,
ROVER Project [Ressources](#) With [Pavel Shishkin](#) , Moscow, Russia
As part of an university project, I was assigned to these following responsibilities:
- Repairing and replacing damaged or malfunctioning components in the ROVER's internal circuitry, including drivers, matrices, batteries, transmitters, receivers, and other essential parts.
 - Developing and implementing a code to control the movement of six wheels using a RC controller [FLYSKY RC](#)
 - Connecting [matrix](#) LEDs to display predefined images.
 - Installing and configuring ROS on a Raspberry Pi to enable real-time data transfer over the internet.
 - Integrating the ROS system with an Arduino board to allow for seamless communication between the two devices.
- Skills Used:
- Troubleshooting and repair of electronic circuits
 - Programming and coding (RC controller, Arduino, ROS)
 - Sensor and actuator integration and control (BeeRotor, IBT_2)
 - Real-time operating systems and data transmission
 - Collaborative problem-solving and teamwork
- 03/2021 - 06/2021 **Computer-Aided Design Engineer - Student**, *Moscow Polytechnic University*,
Development of an Aeroponic Tower System [Ressources](#), with Pavel Stokov. , Moscow, Russia
As part of a university project, I participated in the design and development of an aeroponic tower system. And I was assigned to these following responsibilities:
- Develop the Aeroponic Support 3D model.
 - Define Materials Required for the aeroponic's construction.
 - Evaluate the overall weight of the structure.
- 09/2020 - 12/2020 **Electronic and Control System Technician - Student Lead**, *Moscow Polytechnic University*,
Development of an Water Cleaner Boat, [Ressources](#) Moscow, Russia
As part of an university project, I lead this project and I was assigned to these following responsibilities:
- Create a 3D model of a water cleaning boat using Blender.
 - Develop a circuit schematic and programmed an Arduino board to control DC motors and other actuators for the boat.
 - Successfully implement the boat's navigation system, including sensors and control algorithms.
 - Collaborate with the team to design and test the boat's hardware and software components.
- Skills Used:
- 3D modeling and prototyping
 - Electronics and microcontrollers
 - Programming languages (Arduino & C/C++)
 - Sensor integration and control systems
 - Leadership, teamwork and collaboration

Freelance

- 2019 - 2022 **Graphic Designer**, *Fiverr & [DanGlChris](#)*, Worldwide,
My graphic design services include logo design, branding, flyers and slideshows. I have worked with various clients across different industries, including magazine, food, studio and entertainment.
I also offer web design services. I have created landing pages, portfolios, and short websites for clients in various fields. To view my portfolio, please visit my [Behance](#), [Dribbble](#) or [Fiverr](#) pages.
Notable Achievements:
 - Designed logos and brands for several small businesses, creating visually striking and memorable identities.
 - Created engaging flyers and slideshows for presentations, capturing the essence of my clients' messages and objectives.
 - Developed professional websites that showcase my clients products or services, leveraging my expertise in web design and user experience.
Skills Applied:
 - Logo and brand creation
 - Flyer and slideshow design
 - Web design and development (Angular, HTML, SCSS, and JavaScript - Typescript)
 - Client communication and collaboration
 - Photoshop, Illustrator, Figma
- 08/2023 - 09/2023 **Data Analyst & Graphic Designer**, *[daglox kankwanda](#)*, Worldwide,
Project: Market Trend Analysis and Label Package Design
I Collected data from a digital design market website to identify trends, popular designs, prices, and other key indicators. I processed and analyzed data, created visualizations, and drew insights to inform the creation of a label package design. Published [dataset](#) and [the trend analysis notebook](#) on Kaggle and [design](#) on Behance
Attempted to sell the design on various websites (Adobe Stock, Creative Design, Evanto Marketplaces and Other) but faced rejection, so sold the dataset directly on kaggle using Binance.
Notable Achievements:
 - Successfully identified trends and patterns in the digital design market.
 - Created a visually appealing and informative dataset publication on Kaggle.
 - Developed a unique label package design template.
 - Demonstrated perseverance and adaptability in pivoting to sell the dataset after facing rejection
Skills Applied:
 - Web Scraping with Selenium.py (Webdriver) and JQuery
 - Data analysis, processing and visualization
 - Adobe Illustrator, Kaggle code and Jupyter notebooks
 - Design thinking, Creative problem-solving, Creativity and Attention to detail.
 - Entrepreneurial spirit
 - Understanding for intellectual property and right

Assistantship

04/2023 - 09/2023

Senior Python Developer & Data Scientist Intern, *Remote*,

Project : Textual Analysis to Machine Learning Model for Predicting Activist Seller Success. [Resources](#) with [Oleg Kiriukhin](#) & [Oleg Rogov](#) , Moscow, Russia

As a python developer, assistant researcher and intern data scientist, I worked on a volunteer research project, creating and publishing a machine learning model and Python module for text analysis and prediction. Through this project, I acquired skills in data processing, model implementation, and Python packaging, and developed a deeper understanding of finance and machine learning.

Notable Achievements:

- Collaborated with the research team to create and publish a [Python module](#) and machine learning model for text analysis and prediction.
- Acquired knowledge in finance (Short Seller Activists) and machine learning to contribute to the project, including data processing, model implementation, and Python packaging.
- Utilized cloud-based notebooks, such as Google Colab, to execute experiments and interpret relevant reports.
- Developed skills in data processing, model implementation, and Python packaging through hands-on experience and self-study.
- Published module on [GitHub](#) and PyPI, and made the model available on [Hugging Face](#).

Skills Applied:

- Machine learning model development and deployment
- Topic modeling with BERTopic
- Financial analysis
- Jupyter notebooks and Cloud-based computing (Google Colab)
- Python - PySca old, Panda, numpy, plotly, Bertopic, Transformers, Huggingface_hub, NLTK, Sklearn
- Llama integration
- Data interpretation, visualization and processing
- Team collaboration and communication

Objective:

- To gain practical experience in machine learning and natural language processing while contributing to a research project focused on predicting activist seller success in the stock market.

Projects

8/2021 - 10/2021

Transky - Real-Time Speech Transcription and Translation Widget, *Personal Project*, [Resources](#) and [GitHub Repo](#) Moscow, Russia ,

I Developed a desktop application using JavaFX and integrated with the Google Translate API to provide real-time transcription and translation of spoken words into selected foreign language. The app is free and available on Github can be clone or download as Jar file.

- 2020 - 2021 **H2O Provider - Desktop Application**, *Personal Project*, [Ressources](#) and [GitHub Repo](#) Moscow, Russia ,
Developed a desktop application with full functionality to digitize reports and enable direct communication between Regideso's water distribution stations and water treatment plant.
Achievements:
 - Centralized database to store water quality test results, supply levels, equipment status reports, and maintenance logs from all stations
 - Dashboard for water plant operators to monitor key metrics and alerts
 - Automated report generation with custom templates for daily, weekly, and monthly reporting
 - User access controls and permissions for different roles
 - Intuitive interface for station operators to input readings, pull historical reports, and manage equipment maintenanceSkills Applied:
 - Java - JavaFX, itextpdf, Collection, multithreading, data binding, stream
 - MVC architectural pattern, efficient algorithm development and memory management
 - User interface design
 - Time management
 - Database management using SQLite
 - Problem-solving and debugging
- 2020 **Master Brain - A Software for Efficient Learning**, *Personal Project*, [Ressources](#) and [GitHub Repo](#), Moscow, Russia ,
I Developed Master Brain software in 2020 to overcome difficulty remembering new vocabulary while learning Russian-
Skills Applied:
 - Java - JavaFX, Collection, multithreading, data binding, stream
 - MVC architectural pattern, efficient algorithm development and memory management
 - User interface design
 - Time management
 - Database management using SQLite
 - Problem-solving and debugging
 - Ability to work independently and take initiative in creating solutions to personal challenges
 - Strong attention to detail and focus on efficiency and performanceAchievements:
 - Developed a functional software application that aids in language learning and text memorization
 - Improved personal ability to memorize new words and their meanings through the use of the software
 - Gained experience in designing and implementing a custom software architecture
- 2018 - 2019 **Geodes - Geometric description software**, *Personal Project*, [Ressources](#). Kinshasa, Democratic Republic of Congo ,
Geodes is a software application designed to facilitate the creation of geometric descriptive sketches. The program offers a variety of tools as well for adding points, lines, and plans by their projections and others, Allowing users to quickly achieve their projections clearly and efficiently. While still in development, Geodes has shown promising results and has the potential to become a valuable tool for architects, engineers, and anyone else who works with 3D to 2D projections designs.
Skills Applied:
 - Java - JavaFX, Collection, multithreading, data binding, stream
 - MVC architectural pattern, efficient algorithm development and memory management
 - Time management

2017 - 2018 **G-Chimie - Java Desktop Board Game Application**, *Personal Project*, [Resources](#) and [GitHub Repo](#) with [Joseph Maheshe](#), Kinshasa, Democratic Republic of Congo ,

We Developed a board game with Java 8 and JavaFX, applying MVC design pattern principles. The gameplay has similarities to Go, where players take turns placing point to occupy territories on the board and to form enclosed spaces with point of other player. Used Java and applied MVC architectural pattern, encompassing areas like collections, multithreading, networking, algorithms and memory optimization. The project provided hands-on reinforcement of Java concepts learned from "Introduction to Java Programming" by Y. Daniel Liang.

Skills Applied:

- Java - JavaFX, Networking (Socket, ServerSocket), Collection, multithreading, data binding.
- MVC architectural pattern, efficient algorithm development and memory management
- Analytical skills
- Time management
- Team collaboration and communication

Additional Qualifications

Other Resources

- 2023 Short-activists-predict collection models, [Model](#)
- 2023 Short activist predictor, [Python module](#)
- 2023 Packaging Design Analysis on Kaggle, [Notebook](#)
- 2023 Label Package Design Template on [Behance](#), [Access here](#)

Certificates

- 2023 Roscogress - Second Russia–Africa Summit and Russia–Africa Economic and Humanitarian Forum, [Letter of Appreciation](#)
- 2021 Google Africa Developer Training Program - Mobile Web Development (Angular), [Certificate of Course Completion](#)
- 2021 Data Science - Analyze Data with python, [Certificate of Course Completion](#)
- 2020 Java programming, [Certificate](#)
- 2020 Sprint Up - Entrepreneurial training program, [Certificate of Course Completion](#)

Accomplishments

- 2022 **3th Place of HAGORA HACK - Hackaton 2022**, *Moscow, Russia*, [Access here](#)
- 2022 **MOSCOW CITY HACK - Hackaton 2022**, *Moscow, Russia*, [Access here](#)