

NANCY KABURA MAINA

📍 30519-00100, Nairobi, Kenya

✉ mainanancy700@gmail.com

in www.linkedin.com/in/nancy-maina/

☎ +254792715023

SKILLS

- **Programming Language:** Python
- **AI/ML:** Experience with LLMs and AI-powered workflows
- **Prompt Engineering**
- **Automation Tools:** Power Automate, Zapier, Python (python-pptx, pandas)
- **Cloud Platforms:** Microsoft Azure, Google Cloud
- **Data Analysis & Visualization:** Skilled in using tools like Tableau, Power BI, and Matplotlib for effective data presentation.
- **Robotics:** Autonomous Navigation, Robot Operating System (ROS), Path Planning using OpenCV, Arduino, Raspberry Pi, ESP 32, Git
- Computer-Aided Design (CAD)
- Structural Analysis and Design
- Transportation Planning
- Project Management
- Team Collaboration
- Effective Communication

EDUCATION

BACHELOR'S DEGREE

Meru University of Science and Technology

2019-2023

Bachelor of Technology in Civil Engineering

First Class Honours

PROFILE

A professional specializing in automation, AI, prompt engineering and e-learning solutions, with expertise in streamlining workflows, developing scalable systems, and integrating innovative technologies. Proficient in tools like Power Automate, Python, and Zapier. I am actively seeking a role to apply my skills and drive impactful technical solutions. An advocate for girls' education especially in STEM fields.

PROFESSIONAL EXPERIENCE

SkillCat

Automation Engineer April 2024-present

Innovation Department

- Integrating AI models into existing automation systems or workflows.
- Analyzing the feasibility and potential benefits of automating tasks and developing and implementing automation solutions using AI, large language models (LLMs), and tools such as Power Automate Desktop.
- Streamlining complex workflows, including integrating content into Learning Management Systems(Moodle) and automating processes that are done manually.
- Testing and debugging automated solutions to ensure reliability and accuracy.
- Design scripts and algorithms to manipulate PowerPoint presentations enhancing e-learning content with dynamic elements.

Konza Technopolis

Civil Engineering Attaché May - August 2023

Department of Transport and Infrastructure

- Collaborated with a multidisciplinary team on transportation projects within Konza Technopolis.
- Conducted site inspections, analyzed traffic patterns, and contributed to the design of efficient transportation systems.
- Assisted in the implementation of sustainable infrastructure projects, focusing on environmental and social considerations.
- Gained hands-on experience in project management, site supervision, and quality control.
- Assisting in testing and analyzing construction materials such as concrete, asphalt, and soil.
- Performing structural analysis using software tools(AutoCAD, Civil 3D) to ensure the stability and safety of the designed structures.
- Conducting topographic surveys to gather data about the site's existing features and elevations.

PROJECTS

- Led a team in designing and programming an autonomous robot to enhance the efficiency of routine inspection tasks.
- Designed game-based learning solutions to address misinformation, hate speech, and digital literacy challenges.
- Developed a Machine Learning Model to predict the compressive strength of concrete.
- Automated e-learning workflows, integrating CSV data with Articulate Storyline presentations and developing solutions for content customization.

CERTIFICATES

Issued by Google Careers, Free Code Camp and Coursera, and LinkedIn

- Sustainability for Design, Construction, and Manufacturing
- Green Building
- Construction Management: Reading Civil Construction Drawings
- Digital AEC Foundations
- Introduction to LEED Certification
- Google Analytics for Beginners
- Introduction to Tableau
- Creating Machine learning Models in Microsoft Azure
- Excel Basics for Data Analysis
- Data Analytics Essentials
- Introduction to Data Analytics
- Data Analysis with Python
- Africa Union CIEFFA Online Capacity Building Training

AWARDS/ RECOGNITIONS

- **Women to Women Competition Award by IEEE Women in Engineering**, developed AR Edu, a mobile application that uses Augmented Reality to project 3D models of learning materials.
- **UNESCO-INDIA-AFRICA Hackathon** Finalist. Created an AI tool to detect Cardiomegaly in Chest x-rays.
- **United Nations of Economic Commission of Africa (UNECA) Hackathon Finalist**, Niamey, Niger. Developed a smart agriculture project to assist
- **Women in tech Lead** Recognition at Meru University
- **Codevixens Academy** Data Challenge Recognition.
- **Zuri Awards** STEM Category Nominee

ACCOMPLISHES

04/2023- **FOUNDER WOMEN IN SUSTAINABLE STEM PRESENT AFRICA**

- Established and led a non-profit organization committed to promoting STEM education for young girls in marginalized communities.
- Developed strategic initiatives to bridge the gender gap in STEM fields and harness technology for educational empowerment.
- Collaborated with stakeholders, and local communities to advance the mission of girls' education in STEM.
- Launched educational programs, workshops, and mentorship schemes, positively impacting thousands of young girls.

12/2022 - **GOOGLE WOMEN TECHMAKERS AMBASSADOR PRESENT**

- Serve as an advocate for gender diversity and inclusion in the tech industry.
- Raise awareness about the challenges women face in technology and champion the need for equal opportunities.
- Provide mentorship and guidance to women and girls aspiring to pursue careers in technology.
- Plan and host events including coding, career development and leadership, workshops, and seminars that promote technology education and skill development among women and girls.

01/2022- **MERU UNIVERSITY INNOVATORS CLUB 04/2023 CHAIRPERSON**

- Directing the respective leads of the available tech communities to fully organize sessions and peer teaching of the skills required in the tech communities.
- Ensuring that there is maximum running of the communities together with the set competitions such as Hackathons, organizing Webinars and Bootcamps.

REFERENCES

Dr. Amos Chege Kirongo, Ph.D.
amochege@gmail.com

Lecturer Computer Science |
Coordinator Innovation &
Entrepreneurship | at Meru
University of Science &
Technology

Agatha Kakui
agatha_kakui@yahoo.com

Manager, Marketing & Investor
Facilitation at Konza Technopolis
Development Authority