# Nammiiro Zaharah Bidin

## Personal details



Nammiiro Zaharah Bidin



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Kampala, Uganda



August 8, 2002



Female



Ugandan



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## Skills

Front-end technology

Back-end technology

Software testing

Software Security

Application development

**Project Management** 

**Database Management** 

IoT Technology

Machine learning

**Machine Learning** 

DevOps

Data Science

Collaborative development

### **Profile**

I'm Nammiiro Zaharah Bidin, a passionate software engineer and researcher based in Kampala, Uganda, with a strong focus on AI, IoT, and socially impactful technology. I have currently accomplished my bachelor's degree in May 2025 from Makerere University with First Class Honours in Software Engineering. During my academic journey, I co-founded the *Mama Digital Wallet*, an AI-powered maternal health platform funded by the MAK RISE Seeds Grant. I've contributed to groundbreaking projects in IoT deployment, health tech, and machine learning, while also mentoring students internationally through Club Tangaza. With experience spanning software development, research, and community leadership, I'm driven by a mission to build inclusive, scalable solutions that improve lives across Africa..

## Education

#### **Bachelor of Science in Software Engineering**

Feb 2022 - Jan 2026

Jan 2015 - Feb 2018

Makerere University, Kampala, Uganda

• CGPA-4.45(First class Honours)

O'level

Blessed Sacrament Kimaanya, Masaka 18 aggregates

A'level

Feb 2019 - Nov 2020

Blessed Sacrament Kimaanya, Masaka

Physical Sciences (PEM/ICT) 18/20points

Comprehensive understanding of fundamental concepts in Physics,
Economics, and Mathematics essential for higher education.

#### Virtual Trainee at France/EDHE AI and Blue-Tech Incubation Programme (2025 Cohort)

Feb 2025 - Present

Entrepreneurship Development in Higher Education (EDHE), South Africa

 Developing skills in startup incubation processes, including product development, market analysis, and investor pitching within an international virtual cohort.

# Experience

#### **Software Engineer**

Present

Value Addition Microfinance, Kampala, Uganda

- Collaborating with cross-functional teams to gather requirements, design software architecture, and deliver high-quality code on schedule.
- Utilizing machine learning techniques to develop adaptive features that personalize user experiences in academia.
- Advocating for integrating third-party APIs and cloud services to extend application functionality and support seamless user interactions.
- Spearheading the implementation of innovative AI to enhance the functionality and responsiveness of the company's innovations.
- Advocating for the design and implementation of scalable backend services and RESTful APIs to enhance application performance and reliability.

Great presentation skills

Leadership

#### **Research Assistant**

Oct 2023 - May 2025

Big Data Analytics Lab, Makerere University, Kampala, Uganda

- Contributed to an IoT project as a lead coordinator to deploy uniform gateways across institutions in Uganda, enabling edge computing applications and sustainable energy solutions, a first for the country.
- Configured gateways to the central server and tested IoT wireless devices before deployment.
- Collaborated on the research and paper writing for 'A Deep Learning
   Ultrasound-Based Model for Improving Radiographic Chest Opacities
   Detection', with preparations to engage in the practical model-building phase.
- Contributed to designing and developing the Mama Digital Wallet, a maternal Al-driven health application providing personalised health tracking, financial modelling, and educational resources to mothers in Uganda.
- Contributed to integrating machine learning models to provide tailored health insights, enabling the app to learn and adapt to users' unique health journeys.
- Conducted user research and data collection to improve the app's functionality and usability.
- Supported by the MAK RISE Seeds Grant, emphasising its innovative approach to maternal health equity.

Co-founder Nov 2023 - Present

Mama Digital Wallet Project, Kampala, Uganda

- Led the strategic vision and business development for Mama Digital Wallet, fostering growth and partnerships to enhance maternal health services in Uganda.
- Oversaw the end-to-end product lifecycle, from concept to deployment, ensuring the application met the needs of target users effectively.
- Collaborated with cross-functional teams, including developers, designers, and healthcare experts, to deliver a user-centric Al-driven health application.
- Secured funding and managed relationships with stakeholders, including the MAK RISE Seeds Grant to support innovative maternal health initiatives.
- Advocated for digital health equity in Uganda by promoting the adoption of AI technologies in maternal health through community engagement and public speaking.
- Co-founded and spearheaded the conceptualization and launch of an Alpowered maternal health application tailored for the Ugandan market.

#### **Remote Code Instructor (part time)**

Jan 2023 - Present

Club Tangaza, Kampala, Uganda

Under Club Tangaza

- I coordinate and facilitate coding lessons for students in Uganda, the UK, and the USA, enhancing my coding expertise and fostering intercultural exchanges.
- I design and develop tailored coding curricula for beginners and intermediate learners, focusing on practical programming skills and problem-solving.
- Mentoring and supporting students remotely, providing personalized feedback and guidance to improve their coding proficiency and confidence.
- Utilizing online teaching platforms and tools to deliver interactive and engaging coding sessions, ensuring accessibility for students across multiple time zones.

#### **Software Engineering Intern**

Jun 2024 - Aug 2024

NTV Uganda, Kampala, Uganda

Managed networking systems and supported IT operations across

departments.

- Contributed to a QR code application to enhance user experience on Uganda's leading television platform.
- Explored machine learning applications to improve internal systems.

#### **Guild Representative Council**

Feb 2023 - Feb 2024

Makerere University, Kampala, Uganda

- Represented the students' body in the Debating Union Organ of the university.
- Advocated for student interests and facilitated communication between the college and the university administration at the University.
- Collaborated with the Guild Representative Council to plan and implement student-led events and initiatives.

# Class Representative of Software Engineering Class of 2021

Feb 2022 - May 2025

Makerere University, Kampala

- Coordinated the Software Engineering Class of 2021 as their leader.
- Organized and led meetings to address the academic and social concerns of the Software Engineering Class of 2021.
- Provided support and guidance to classmates on academic policies and resources, enhancing their university experience.

#### **Volunteer(Software Engineer)**

Feb 2025 - Present

Nuflo, South Africa

At Nuflo, I support the development of an AI-powered menstrual health platform by contributing my software engineering skills to build secure, user-friendly systems that enhance access to menstrual products and health education across Africa.

## Certificates

Huawei Seeds for the Future Program	Jun 2024
Guild Representantive Council	Mar 2024
Julius Nyerere Leadership Training	Jul 2024
<b>Emerging Leaders Program Training</b>	Jan 2025
Peace and Security Training by Konrad Adenauer Stiftung	Nov 2025
5G, Digital Power, AI, and Cloud Computing (Huawei Tech for Good Program)	Nov 2023
Bridge for Billions(NufloTeam member)	Jun 2025
Makerere Engineering Society Innovation Incubation program (Outstanding participation)	Apr 2025

# **Achievements**

 IoT Gateway Project(2024-date): Key contributor to deploying and configuring Uganda's first uniform IoT gateway infrastructure for edge computing and

- sustainable energy solutions.
- Huawei Tech for Good Program (2023): Practical skills in 5G, Digital Power, AI, and Cloud Computing, and came up with a poultry care pro IOT system to assist Uganda Poultry Farmers
- Women in FinTech Hackathon (2023): Top 3 finalist with a fintech app addressing financial literacy and tailored savings for campus students.
- Nuflo (2025): Joined Nuflo as a Team member, NuFlo is a social impact initiative currently in South Africa, using a digital Pad Locator App and community-based Pad Hotspots to provide free, dignified access to menstrual products now entering phase one and aiming to expand across Africa while leveraging modern technologies like AI to offer insights and education on menstrual health.
- Fitspa Women Competition: Top finalist with FinHub, a fintech app solving tuition acquisition challenges.
- Start Hub Entrepreneurial Hackathon: Designed a simulated self-recharging hyper-generator project as part of a team of three in 2022
- Tika 3D Design and Printing Competition: Designed a 3D solution to educate girls in Uganda about their reproductive systems and the effects of contraceptive use; served as team leader.
- Uganda Oxford IFRAM Competition (2023): Developed an AI platform for youth to assist in employment acquisition and entrepreneurship in Northern Uganda as part of a team of three.
- Huawei Seeds for the Future (2023): Alumni member for a project that used loT and embedded systems to assist poultry farmers; awarded a digital trip to China
- Makerere Seeds Grant (2024): Co-founder and leading the development of a maternal health fintech solution (Mama Digital Wallet), an Al-driven project supported by the MAK RISE Seeds Grant, now at phase 1.

## References

#### **Ntanda Moses**

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