Nammiiro Zaharah Bidin

Personal details

👤 Nammiiro Zaharah Bidin

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🏠 Kampala, Uganda

⚧ 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

Research and Paper Writing

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   **Jan 2021 - Jan 2026**
Makerere University, Kampala, Uganda
- CGPA-4.45(First class Honours)

O'level   **Jan 2015 - Feb 2018**
Blessed Sacrament Kimaanya, Masaka
18 aggregates

A'level   **Feb 2020 - 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-   **Feb 2025 - Present**
Tech Incubation Programme (2025 Cohort)
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.

Employment

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.
- Perform thorough testing and debugging across multiple platforms to ensure robust, secure, and user-friendly software solutions.
- Spearheading the implementation of innovative AI to enhance the functionality and responsiveness of the company's innovations.

Great presentation skills

Leadership

- Advocating for the design and implementation of scalable backend services and RESTful APIs to enhance application performance and reliability.

Research Assistant   Jan 2024 - Dec 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 AI-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 AI-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 AI-powered maternal health application tailored for the Ugandan market.

Remote Code Instructor (part time)   Jun 2022 - Present
Club Tangaza, Kampala, Uganda
Under Club Tangaza
- Coordinated and facilitated coding lessons for students in Uganda, the UK, and the USA, enhancing my coding expertise and fostering intercultural exchanges.
- Designed and developed tailored coding curricula for beginners and intermediate learners, focusing on practical programming skills and problem-solving.
- Mentored and supported students remotely, providing personalized feedback and guidance to improve their coding proficiency and confidence.
- Utilized 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

- 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 & Class Representative of Software Engineering Class of 2021　　　　　　　　　　　　　　**Jan 2023 - Dec 2024**
Makerere University, Kampala, Uganda

- Represented the students' body in the Debating Union Organ of the university.
- Coordinated the Software Engineering Class of 2021 as their leader.

- Advocated for student interests and facilitated communication between the Software Engineering class and university administration at the University.
- Collaborated with the Guild Representative Council to plan and implement student-led events and initiatives.
- Organized and led meetings to address 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.

Certificates

Huawei Seeds for the Future Program　　　　　　　　　　**Jun 2024**
- Gained hands-on experience with Huawei's cutting-edge technologies and global ICT trends.

Guild Representantive Council　　　　　　　　　　　　**Mar 2024**

- Awarded a certificate having served as the Guild Representative Council, where I collaborated with university administration and fellow council members to implement programs addressing student rights and campus development challenges.

Julius Nyerere Leadership Training　　　　　　　　　　**Jul 2024**

Emerging Leaders Program Training　　　　　　　　　　**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　　　　　　　　　　　　　　　　**Jun 2025**
- Completed the Bridge for Billions Incubation Programme 2025, gaining hands-on experience in entrepreneurship and business model refinement.

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 IoT and embedded systems to assist poultry farmers; awarded a dig
- Makerere Seeds Grant (2024): Co-founder and leading the development of a maternal health fintech solution (Mama Digital Wallet), an AI-driven project supported by the MAK RISE Seeds Grant, now at phase 1.

References

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