

SSEMULI JOSEPH

Computer Scientist, AI Innovator in NLP and Full-Stack Developer

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My Professional Summary.

Computer Scientist passionate about Artificial Intelligence and Software Development dedicated to bridging the digital divide in East Africa through Artificial Intelligence. Specialist in Natural Language Processing (NLP) and predictive modeling, with a focus on developing AI solutions that understand local Ugandan languages. Proven ability to architect complex systems across Java, Python, and PHP, combining "Mind and Hand" to solve local challenges with global-standard technology.

Some of my the Outstanding Contributions.

- Citizen Voice Sentiment Tracker: <https://github.com/MrXeskevin/Citizen-Voice-Sentiment-Tracker>(Collaboration)
- Sunflower Translator: <https://github.com/MrXeskevin/Sunflower-Translator>(Collaboration)
- Digital Extension Worker: <https://github.com/MrXeskevin/Digital-Extension-Worker>(Collaboration)
- **Engineered a Predictive Healthcare Model:** Developed a Machine Learning system using Python and Scikit-learn to predict patient "no-shows" ([Healthcare No-Show Predictor](#)), directly addressing hospital resource wastage and improving scheduling efficiency.
- **Architected a Robust [Train Reservation System](#):** Designed and implemented a complex booking engine in Java, featuring automated seat allocation logic and real-time transaction processing to streamline transport logistics.
- **Developed [Task-Flow Productivity Suite](#):** Engineered a dynamic task management application using JavaScript and CSS, implementing real-time state management to optimize personal workflow and organizational efficiency.
- **Built [Career-Hub Employment Platform](#):** Created a full-stack job-matching system using PHP and MySQL, facilitating secure user authentication and bridging the gap between talent and opportunity in the local labor market.

My Technical Competence

- **AI and Machine Learning:** Scikit-learn, Pandas, NumPy, NLP, Predictive Modeling, Data Visualization.
- **Languages:** Java, Python, PHP, JavaScript, C.

- **Web Technologies:** Django, MySQL, HTML5, CSS3, Asynchronous Programming.
- **Tools:** Git and GitHub for Version Control, Linux Environments, notebooks

Education Background

- Mbarara University of Science and Technology (MUST) (2024 – Present) Bachelor of Science in Computer Science
- **Relevant Coursework:** Data Structures & Algorithms, Database Management Systems, Object-Oriented Programming, Discrete Mathematics, Operating Systems.
- **Key Focus:** Application of AI in resource-limited settings and localized software engineering.
- St.Mark's College Namagoma (2022-2023)-Uganda Advanced Certificate of Education.
- St.Mark's College Namagoma (2017-2020)- Uganda Certificate of Education.
- St.Joseph's Primary School Nabbingo (2010- 2016)- Primary Leaving Examinations Certificate.

Leadership & Community Engagement

- **Technical Innovator, MUST Computing Community:** Active contributor to peer-to-peer coding sessions, focusing on assisting first-year students in mastering logic and backend development.
- **Open Source Contributor:** Maintainer of multiple GitHub repositories (Task-Flow, Career-Hub), ensuring code transparency and documentation for the global developer community.
- **Member, Google Developers Community at MUST:** Engaging in hackathons and workshops to apply technology to community-based problems in Mbarara.

Achievements and Awards

- ◆ Certificate in the 2025 UNESCO UNITWIN Design Sprint Camp in Uganda.
- ◆ Certificate in Introduction to Data Science with Python via Coursera from the University of Michigan
- ◆ Certificate in Python Training by Ghent University
- ◆ Recognised and Awarded as Most disciplined student in the 2022-2023 A'level class.
- ◆ Class Councillor for the Biological class of 2022-2023.
- ◆ 2nd runner up Wakiso District Regional Dance Sport Competitions.
- ◆ 3rd runner up in National Dance Sports Competitions for Uganda Secondary Schools Association(USSSA) Ball games II.
- ◆ Brighter Monday Soft Skills training Certificate
- ◆ Amazon Web Services Badges in Compute and Storage

- Attended the Dev-fest Mbarara organised by the Google Developers Community where we were introduced to many tools and effective coding strategies.

Referees

Mr.Ambrose Atuheire- Lecturer at MUST, 0702593313

Dr.Simon Kawuma- HoD SWE, 0702190961 or 0774253512