BEINGANA JIM JUNIOR

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EDUCATION

- **Makerere University** — Kampala, Uganda
  Bachelor of Science in Software Engineering — *Expected completion 2027*
  Key Courses: Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases

- **Riviera High School** — Kigali, Rwanda
  Mathematics, Physics, Geography

EXPERIENCE

- **Crane Cloud** — Full time
  Internship — *May 2025 - Sep 2025*
  - **Developed Crane Cloud Mira**: an automatic containerization pipeline converting source repositories into OCI images, implemented build caching and parallel build orchestration to reduce iteration time and implemented a Cloud Native Buildpack
  - **Technical Writing And Specification**: Drafted Technical documents such as SRS and Software Design Documents for the Development of Mira
  - **Kubernetes and DevOps**: Orchestrated containers and DevOps pipelines using Kubernetes at a large scale and implemented custom operators

- **Credit and Beyond Limited** — Part-time
  FullStack Software Engineer — *Jan 2024 - Present*
  - **Project: e-MicroFin**: Developed and Maintained e-MicroFin an internal Business Information system and Business Process Automation software used daily for loan registration, amortization schedules, payments, reconciliations, and financial reporting. Ensuring correctness in financial calculations and transactional integrity
  - **Role**: Designed APIs and data models with explicit invariants, optimized database queries to reduce latency and improve throughput under load
  - **Impact**: Reduces loan application and client on-boarding processes time from hours to minutes. Report Generation and analysis time reduced from days to near instantaneous generation and improved report accuracy.

PROJECTS

- **Conveyor CI**: Lightweight, headless cloud-native CI/CD orchestration engine designed for predictable, auditable build workflows. Led architecture and implementation of the scheduler, plugin interface, and API surface, authored complete documentation and demos. Project has over 17 external contributors. https://conveyor.open.ug

- **Orbiton JS**: Minimal virtual-DOM UI library (React/Vue style). Implemented an incremental renderer and VDOM diffing optimizations; Implement a JSX code Transpiler to enable compilation to JavaScript. https://orbiton.js.org/

- **Hope Haven Grade Analysis Platform**: A Data Analysis Software used by administrators to analyse trends, insights and predictions in student grades and performance. Used by Hope Haven Christian School, Rwanda.

- **reactjs-media**: A React JS component library used to build custom web media players. With over 800+ public projects depending on it on Github and over 60,000 npm downloads over time

SKILLS SUMMARY

- **Languages**: Python, Go, JavaScript/Typescript, Ocaml, Rust, Bash
- **Concepts**: Containerization, Web Development, CI/CD, Data Structures and Algorithms, Data Analysis
- **Frameworks**: Django, Flask, Next.JS, React, FAST API, Express, Go Fiber
- **Tools**: Kubernetes, Docker, GIT, PostgreSQL, MySQL, Redis, NATS
- **Platforms**: Linux, Web, GCP, GitHub
- **Soft Skills**: Leadership, Event Management, Technical Writing, Public Speaking, Time Management
- **Algorithms and Problem Solving**: Data structures, algorithmic complexity, graph traversal, dynamic programming (active LeetCode practice)

VOLUNTEER EXPERIENCE

- **Community Lead at Cloud Native Kampala** — Kampala, Uganda
  Organized and Coordinated community events and meetups — *Oct 2025 - Present*

- **Maintained the Makerere University Computer Science Department Website** — Kampala, Uganda
  Maintained the department website ensuring reliablility and met department requirements — *Sept 2024 - Present*

- **Programming Tutor** — Kigali, Rwanda
  Tutored a team of Highschool Students and assisted them in their coding projects — *Aug 2025 - Sept 2025*