Aaron Essien

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EDUCATION

University at Buffalo — Buffalo, NY
Bachelor of Arts in Computer Science, Minor in Psychology — *Aug. 2021 – May 2025*

EXPERIENCE

Software Development Engineer in Test Intern — June 2024 – August 2024
Sagesure Insurance — *Jersey City, NJ*

- Implemented comprehensive end-to-end testing strategies to ensure application stability and performance, leveraging tools such as **Postman** for RESTful API testing and **Pytest**, **Playwright**, and **Selenium** for front-end UI testing.
- Integrated **automated testing frameworks** directly into the **CI/CD pipelines** to run **regression**, **functional**, and **end-to-end tests**, ensuring code quality at every deployment stage.
- Designed, executed, and maintained **regression test suites**, ensuring application stability across multiple releases by identifying and addressing defects introduced during development.
- Managed the **Software Development Life Cycle (SDLC)** using **Jira**, efficiently tracking bugs, creating user stories, and reporting testing progress to stakeholders.
- Collaborated with cross-functional teams to implement robust automated testing frameworks (**Pytest**, **Selenium**, **Playwright**) within CI/CD pipelines, ensuring consistent code quality and mitigating production bugs.
- Participated actively in an **Agile environment**, contributing to sprint planning, backlog refinement, daily stand-ups, and retrospectives, fostering team alignment and delivering incremental software improvements.
- Authored thorough documentation of a new utilization of the Playwright library to be implemented on all software products the company plans to release in the future.

PROJECTS

NotesReader | *Python, Flask, React, MongoDB, Docker* — September 2024 – December 2024

- Collaborated with a cross-functional team to build an AI-powered tool that converts lecture slides into interactive study materials, enhancing learning efficiency.
- Utilized **Pytesseract** for robust text extraction from PDFs and PowerPoint, and integrated **Google Gemini** for summarization and question generation.
- Created adaptive and tailored quizzes based on user interactions, which in turn dynamically adapts to the user's progress.
- Sought to design the system with future growth in mind, ensuring that all features we made were also able to seamlessly integrate with any new educational tools and features.

Playlist Transfer | *Spotipy API, Python, RESTful API* — June 2024 – July 2024

- Utilized Spotipy API and Apple-Music API services to transfer songs and playlists from one platform to another.
- Integrated Spotipy (**Spotify API wrapper**) for seamless playlist extraction and metadata retrieval.
- Utilized **Apple Music API** to add and organize playlists on Apple Music based on Spotify data.
- Implemented data parsing to match song metadata (title, artist, album) across platforms, ensuring accurate transfers.

TECHNICAL SKILLS

Languages: Python, Java, Scala, C/C++, SQL, HTML, CSS, JavaScript
Frameworks: ReactJS, JUnit, Pytest, Flask
Developer Tools: Docker, Git, Postman, REST API, RESTful API, Jira, Chrome Dev Tools, AWS Cloud, Confluence, Tesseract, MongoDB
Libraries: pandas, NumPy, Pytest, Playwright, Selenium