

# Sahrfear Macarthy

## Objective/Summary

- Over 1 year of academic project experience in JavaScript and Python, with demonstrated skills in practical implementation and hands-on development.
- Proficient in front-end technologies including AngularJS, React, React Native, HTML, and CSS.
- Experienced with back-end development using Node.js and TypeScript, Django, ensuring robust and scalable server-side solutions.
- Committed to continuous learning and staying updated with the latest industry trends and technologies.
- Increased software reliability through a focus on testing with a TDD approach.

## SKILLS

Version Control • Testing Frameworks • RESTful APIs Development • Object-Oriented Programming (OOP) • Design Patterns • Problem-solving • Communication Skills • Team Collaboration • Agile software development

**Languages & Databases:** JavaScript • HTML5 • CSS • RDBMS (MySQL) • NoSQL (MongoDB) • TypeScript • Python

**Frameworks & Libraries:** Angular • Express • React • Jest • Mocha • React Native • Django

**Tools & Infrastructure:** NodeJS • Linux • REST APIs • MacOS • Windows • Microservices • CI/CD • Git • Postman

## PROFESSIONAL EXPERIENCE

**Associate Test Engineer Level III** – Onto Innovation Company

Aug-2024– Present

- Utilized strong analytical and troubleshooting skills in an agile environment to resolve complex issues, enhancing project efficiency and outcomes.
- Developed and implemented improvements in engineering processes to boost productivity.
- Enhanced team collaboration by tailoring communication to diverse team needs, leading to greater project cohesion and successful results.
- Reduced time and effort required for data aggregation by 30% by using Python and Excel, streamlining processes and significantly boosting productivity across the entire production pipeline

Technologies Used: N 2000 Software (test data analysis), HBLS Utilities, MPA, Python, Excel

**Software Development Instructor** – SLinT | New York | Sierra Leone

May 2022 – May 2024

- Supported continuous improvement by providing constructive feedback in design and code reviews.
- Strategically planned and executed lesson plans to teach an average of 20 students online through custom instruction in areas such as Web development (using JavaScript, HTML & CSS).
- Worked closely with developers, staff, and leadership to create and implement tailored solutions that successfully resolved customer issues, improving overall service delivery.
- Promoted best practices and continuous improvement within the tech team by actively contributing to development standards, resulting in streamlined processes and improved code quality.

Technologies Used: Code Version Control, React, Angular, TypeScript, JavaScript, HTML, CSS, Bootstrap

**Web Developer** – I.L.I.T Consultant Inc | San Antonio, TX

Aug 2024 - Present

- Developed and enhanced tools that empowered users to effectively analyze and interpret large-scale data, improving decision-making and operational efficiency.
- Standardized workflows & improved collaboration among a team of 10 developers by creating and maintaining documentation regarding new feature sets.
- Performed debugging, troubleshooting, and modifications to software, ensuring timely resolution of issues and thorough testing to deliver reliable and high-quality solutions

- Developed comprehensive documentation and collaborated in creating technical procedures and user support guides, enhancing team efficiency and providing clear, accessible resources for end-users.

Technologies Used: SQL, ETL Tools, Git, RESTful APIs, Angular, Python, Tableau

## PROJECTS

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### **Medication Reviews/Side-Effects application** – Full-Stack Developer Jun 2024 – Jul 2024

- Designed a responsive frontend using Angular, TypeScript, and Angular Material UI
- Created a backend with Node.js, Express for RESTful APIs, and MongoDB for data storage and retrieval
- Implemented JSON Web Tokens (JWT) authentication and role-based access control to enhance security and user experience
- Conducted unit tests with Mocha to validate authentication and CRUD functionality.

Technologies Used: Angular, JavaScript, TypeScript, Node.js, Express JS, MongoDB, JWT

### **Integrated Library Management System** – Full Stack Engineer May 2024 – Jun 2024

- Developed an Integrated Library Management mobile application using React Native with key features.
- Implemented JSON-Server for data storage, centralized logic using a Reducer Function, and efficient data management with arrays.
- Secured user authentication for the application using JWT, ensuring safe access to the system.
- Utilized Mocha for unit testing, ensuring reliable authentication and CRUD operations which improved overall application stability and reduced bugs by 40%.

**Technologies Used:** React Native, Axios, JavaScript, TypeScript, Node.js, JSON Server, Context API

### **Music Website** – Full Stack Engineer Apr 2024 - May 2024

- Implemented optimal design principles in creating user-friendly responsive frontend with React.JS, TypeScript and Bootstraps, leading to increased user engagement.
- Developed backend with Express for RESTful APIs, Node.js as the development platform, and JSON Server for data storage and retrieval
- Utilized React hooks (Context API, useEffect, useMemo) and state management to optimize the application's performance, reducing load times by 30% and improving overall user engagement
- Applied the Factory design pattern to create various user account types and managed full CRUD operations.

Technologies Used: React JS, Axios, JavaScript, TypeScript, Node.js, Express JS, JSON Server

### **Movie Application** – Backend Developer Sep 2023 - Oct 2024

- Built a movie web application where users can browse and view detailed information about movies, including release year, genre, and ratings.
- Developed views and models using a component-based architecture, handling HTTP requests and delivering appropriate responses.
- Implemented secure user authentication using JSON Web Tokens (JWT) and managed request flow with middleware.
- Created database migrations, designed templates, and customized the admin interface using Bootstrap for an enhanced user experience.

Technologies Used: Django, Python, SQL

## EDUCATION

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### **Master's in Software Development (GPA :3.76/4.0)** Aug 2023 – Dec 2024

Maharishi International University | Fairfield IA

Key Courses: *Front-End Development: JavaScript, TypeScript, Algorithms, React, React Native, Angular, HTML, CSS.*  
*BackEnd Development: Node.js, MongoDB, APIs-Development, Django*

### **Bachelor of Science in Physics** Feb 2015 – Mar 2019

Fourah Bay College | University of Sierra Leone