

Amia Diakite

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Education

Rochester Institute of Technology

December 2024

Master of Science in Software Engineering

Rochester, NY

- **Relevant Coursework:** Found of Algorithms(Java), Found of Cryptography, Found of AI, Found of Computer Networks, Found of Cybersecurity, SW Architecture, SW Quality Assurance, Collaborative SW Dev

Syracuse University

May 2022

Bachelor of Science in Information Management and Technology

Syracuse, NY

- **Relevant Coursework:** Advanced Computer Networks, Digital Forensics, Application Programming for Info Systems

Technical Skills & Certifications

Languages & Technologies: Python, TypeScript, Haskell, Java, JavaScript, HTML, CSS, SQL, React.js, C++, Flutter, XML, Django, Bootstrap, Postgres, MongoDB, Linux, Windows, AWS

Organizational: Excel, Microsoft Word, PowerPoint, Revit, Autodesk Fusion, Jira, GitLab, MS Project, Jenkins, Wireshark

Certifications: Autodesk Inventor, Learning Azure Management Tools

Experience

US News & World Report

May 2023 – August 2023

Software Engineer Intern

New York, NY

- Aided in the development of a Python script using Boto3, improving AWS authentication efficiency, and maintained the Autos website, restoring broken links and images, to enhance user experience.
- Implemented a backend solution for publishers, leading to an increase in database efficiency for real-time updates of over 10,000 automotive vehicle deal records in the SQL database.

May 2022 – August 2022

- Actively engaged in weekly leadership meetings and daily scrum sessions with the Autos software team, contributing to an improvement in project coordination and workflow efficiency.
- Managed and resolved over 30+ Jira tickets, ensuring timely tracking and resolution of client issues and effectively used agile technologies like Confluence and Git for version control, push and merge operations.

Juware

May 2020 – July 2020

Software Engineer Intern

Remote

- "Collaborated as a key front-end React developer on a 4-person team to design and create a COVID-19 contact tracing application, to successfully deploy to client organizations, aiding in the effective health monitoring.
- Actively engaged in executive leadership meetings and daily scrum sessions, contributing valuable insights that led to a 10% improvement in project development timelines.

Projects

TaskMaster: Collaborative Task Management Application | Python, React

- Built and deployed a full-stack application using React, Flask-RESTful framework, and PostgreSQL for data persistence.
- Implemented core task management features, including CRUD operations, task categorization, user-specific data access, and task progress analytics.
- Incorporated user authentication, role-based access control, intuitive task filtering, and sorting functionalities.

Reliable Data Transfer Protocol | Python

- Implemented a custom TCP-like protocol on top of UDP datagrams using python's Socket library .
- Developed robust data transmission features like TCP-checksum for data integrity. Enhanced performance with advanced congestion control techniques, including slow start, congestion avoidance, and sliding window control .
- Conducted rigorous testing of the developed protocol between remote machines simulating real-world network conditions.

Distance-Vector Routing Protocol (RIP) Simulation | Python

- Designed and implemented a Distance-Vector Routing Protocol (RIP) simulation using UDP sockets.
- Developed routing table updates, CIDR support, and failure recovery mechanisms.
- Simulated router failures and real-time route updates to enhance network resilience.