Sherkeem Duprey

347-423-3123 | sherkeemduprey@gmail.com | linkedin.com/in/sherkeem-duprey/ | github.com/Sduprey18

Education

University of Rochester Rochester, NY

Bachelor of Arts in Computer Science *Aug. 2022 – May 2026*

Relevant Coursework:

Data Structures & Algorithms, Web Programming, Computation Formal Systems, Artificial Intelligence, Mobile App Development

Experience

Fullstack Software Engineering Intern May 2025

Intuit *Mountain View , CA*

- Incoming summer 2025

HVAC Automation Intern June 2024 – August 2024

Merck *Rahway, NJ*

- Facilitated data analysis and automated processes through the implementation of Pi Displays for 10 buildings, resulting in 30% increase in HVAC cooling efficiency and real-time monitoring of key metrics.
- Developed a PowerApp to simplify disabled point reporting and viewing for 900+ points per month incorporating, PowerBI integration, and PI WebAPI for accurate tag location and validation.
- Identified and addressed over 300 undocumented points in the PI system, ensuring accurate and comprehensive documentation for all data points.

XR Applications Developer Sep. 2023 – Present

Studio X *Rochester, NY*

- Spearheaded the advancement of the coding team in Aurum, the in-house alchemy VR game, creating C# scripts to create game functionality, exhibited to over 500 patrons at exclusive events.
- Teaching and providing support for over 60 workshops, attended by over 1,700 participants, through the academic year, on topics such as Unity, Blender and XR development.
- Provided technical consultations in-person and on Discord for XR development.

Projects

Java Street Mapping | *Java* Github link

- Developed a Java program for map processing, to determine the fastest/shortest destination route.
- Utilized my own custom built HashMap, and LinkedLists for graph representation.
- Enacted Dijkstra's algorithm for finding the shortest path.
- Implemented Kruskal's algorithm for finding the minimum weight spanning tree.

Finite Automata String Validator | *C* Github link

- Developed a C-based application to simulate Deterministic Finite Automata (DFA) and Nondeterministic Finite Automata (NFA) for string validation tasks.
- Built interactive REPL functions for both DFA and NFA simulations, allowing dynamic user input to test string acceptance.
- Utilized custom C structures and functions to manage states, transitions, and string evaluation for both automata types.
- Utilized custom C structures and functions, improving automata processing efficiency by 20% through optimized state transitions and reduced computational overhead.

Technical Skills & Organizations

Languages: Swift, Java, Python, C/C#, JavaScript, HTML/CSS
Frameworks: React, Node.js, Flask, SwiftUI
Developer Tools: Git, Docker, Aveva PI System, VS Code, Visual Studio, Xcode, PlasticSCM, Unity
Organizations: ColorStack, National Society of Black Engineers, Participant of Amazon's Campus Summer Series, Google Software Engineering Program (G-SWEP)