Jamal R. Jowdeh

jamalrafejowdeh@gmail.com | (708) 904-3500 | linkedin.com/in/jjowdeh/

EDUCATION

Illinois Institute of Technology   **Chicago, Illinois**
B.S. in Computer Science (Specialization: Full-stack Development)   **Graduation Date:** 05/2025

- **Background:** Specializing in full-stack development, with a strong foundation in computer science, scalable web applications, optimizing data workflows, and cloud technologies such as AWS and Docker. Proficient in API integration, workflow automation, and data pipeline optimization, Passionate about building scalable software systems
- **Relevant Coursework:** Software Engineering, Data Structures & Algorithms, Computer Architecture, Fundamentals of Web Development, Database Organization, Programming Languages and Translators
- **Honors:** *Heald Scholarship, STEM+ Scholarship, Deans List (Spring 2021)*

TECHNICAL SKILLS

Programming Languages| Python, Java, C, SQL, R, Javascript, HTML, CSS, React, Racket, Assembly x86
Frameworks & Libraries| React.js, Node.js, MySQL, Chart.js, MongoDB
Cloud and Relevant Tools| AWS(EC2, S3), Docker, MySQL, PostgreSQL, Firebase, Chameleon Cloud, REST APIs
Expertise| Machine Learning, Statistical Modeling, System Debugging, Database Management, Data Recovery, System Performance Engineering
Languages| Arabic, Spanish, English

SOFTWARE ENGINEERING WORK EXPERIENCE

Teaching Assistant   7/2024 – 11/2024
Object-Orientated Programming Teaching Assistant, Illinois Institute of Technology   **Chicago, Illinois**
- Mentored students in OOP principles, design patterns, debugging, and software optimization.
- Supervised collaborative projects, ensuring modular design, efficiency, scalability, and maintainability

Advanced Repair Agent   7/2024 – Present
Advanced Repair Agent, BestBuy Co., Inc.   **Orland Park, Illinois**
- Diagnosed and resolved complex hardware, software, and networking issues to optimize system performance
- Developed automation scripts and preventive maintenance strategies to enhance service efficiency and reduce recurring issues

SOFTWARE ENGINEERING PROJECTS AND RESEARCH

AI United States Roadtrip Planning Assistant   9/2024 - 10/2024
CS480 Intro to Artificial Intelligence, Illinois Institute of Technology   **Chicago, Illinois**
- Developed a Python-based road trip planner using a Constraint Satisfaction Problem solver with backtracking
- Enforced path constraints for valid road connections, optimizing routes to include one state per zone while ensuring a minimum number of national park visits

Real Estate Data Website   9/2023 - 9/2023
CS425 Database Organization, Illinois Institute of Technology   **Chicago, Illinois**
- Designed and developed a SQL-based database website with a HTML/CSS/JavaScript front-end for intuitive data management.
- Presented implementation to faculty, demonstrating expertise in SQL, database management, and UI design

DataFrame Storage Application   8/2022 - 8/2022
CS331 Data Structure and Algorithms, Illinois Institute of Technology   **Chicago, Illinois**
- Built a Java-based dataframe storage system with CSV upload, transformation, and structured data analysis capabilities
- Designed an interactive UI to enhance data manipulation and accessibility.

Penetration Testing: Binary Lock   2/2023 - 3/2023
CS351 Systems Programming, Illinois Institute of Technology   **Chicago, Illinois**
- Conducted low-level assembly analysis to identify and exploit system vulnerabilities.
- Bypassed a binary lock using memory manipulation techniques in C and GDB.

Virtual Cache Simulator   1/2023 - 2/2023
CS351 Systems Programming, Illinois Institute of Technology   **Chicago, Illinois**
- Developed a memory trace analysis tool to optimize cache replacement policies and reduce cache latency.
- Implemented performance benchmarks to enhance computational speed.