Asser Essam

Software Engineer

Nasr City, Cairo | asseressam123@gmail.com | +20 01155108208 | linkedin.com/in/asser-essam-3886a3285

PROFESSIONAL SUMMARY

Software Engineer with a strong foundation in object-oriented programming, data structures, and algorithms. Proficient in applying software design patterns, including Singleton and Observer, to build efficient applications using Java, C++, and Python. Experienced in database management with SQL and MySQL and possesses a unique perspective on system-level development from hands-on work designing and integrating software with custom hardware for award-winning projects.

WORK EXPERIENCE

FRONT DESK REPRESENTATIVE

AIR GYM, CAIRO

June 2024 - December 2024

- Advised members on suitable fitness plans, personal training, and wellness packages.
- Developed strong member relationships to improve satisfaction and client loyalty.
- Earned the "Best Performance" award for two consecutive months for top sales and service.

INSTRUCTOR, PCB DESIGNING AND FABRICATION BIG HERO ACADEMY, CAIRO

March 2020 - December 2021

- Taught and mentored students in the design and fabrication of Printed Circuit Boards (PCBs).
- Delivered hands-on training sessions covering PCB design software, fabrication techniques & assembly processes.
- Developed course material and exercises to enhance students' practical understanding of PCB manufacturing.

EDUCATION

BACHELOR OF SCIENCE IN COMPUTER SCIENCE - SOFTWARE ENGINEERING

Arab Academy for Science & Technology (AAST), CAIRO

September 2022 – October 2026

TRAINING

SOFTWARE TESTING DIPLOMA | Machinfy Academy

July 2025 - November 2025

- Mastered foundational principles based on ISTQB and ISTQB Agile methodologies.
- Acquired practical skills in Manual, API, and Database testing techniques.
- Gained a comprehensive understanding of the fundamentals of Automation Testing.

UI/UX DESIGN TRAINING | National Telecommunication Institute August 2025 – September 2025

- Mastered UI/UX fundamentals, including user research, wireframing, information architecture & usability testing.
- Developed proficiency in creating high-fidelity designs and interactive prototypes using Figma.
- Applied skills to hands-on projects, including the design of a mobile application interface and a website landing page.

PROJECTS

FINGERPRINT ATTENDANCE SYSTEM

January 2023

- Developed a complete fingerprint-based attendance system by designing the hardware and creating custom software to process data and improve administrative efficiency.
- Awarded "Best Project" during college evaluations for its innovation and impact.

FULLY AUTONOMOUS COTTON CANDY ROBOT

April 2019

- Led the electronic design for a fully autonomous robot, implementing all circuits, sensors, and control systems to ensure smooth operation.
- Recognized with two major awards: "Best Project" at the National Maker Faire and a "Top 10" placement at the International Maker Faire in New York.

SKILLS

Languages: Java, C++, Python, SQL, HTML/CSS, JavaScript Testing: Manual, API, Database & Automation Testing (ISTQB) Design & Tools: Figma (UI/UX), PCB Design, Git, Microsoft Office

Professional Skills: Problem-Solving, Communication, Collaboration, Analytical Thinking