

AbdelRahman Adel

+201001202562 | me@ad3l.dev | ad3l.dev | ad3ldev | ad3ldev

Skills

Proficient C/C++, TypeScript/JavaScript, Go, Python, React, Git, Docker, REST, CI/CD.

Moderate Java, Svelte, Kotlin, Swift, GraphQL, SQL, Rust, Shell(Bash/Zsh), Linux, Kubernetes.

Work Experience

e-SKY Solutions

Kirkland, Quebec, Canada

Jr. Full Stack Software Developer

May 2024 - Present

- Recognized with "Born Builder" award for embodying the company's core value of taking initiative to build high-quality software solutions and demonstrating a natural passion for creating impactful technology.
- Designed and implemented a high-performance multithreaded translation service between SOAP and REST APIs using Go, achieving 20,000 concurrent user capacity.
- Spearheaded development of an enterprise invoice generation system using Electron, React, and Node.js, then optimized performance by 25x through complete reengineering with Rust and Tauri (reducing package size from 500MB to 25MB).
- Architected and migrated the invoice generator from Tauri desktop application to a secure web-based platform featuring end-to-end encryption for sensitive invoice data, Java SpringBoot backend with Single Sign-On (SSO) integration, and PDF generation service.
- Refactored authentication architecture across a complex web application spanning 40+ files, replacing Redux with React Context while implementing secure session management using Cookie and Session Storage APIs.
- Established DevOps infrastructure by creating parameterized templates, multi-stage Dockerfiles, and configurable GitLab CI/CD pipelines, reducing deployment time by 60%.
- Engineered containerized microservice environments for React frontend and NestJS backend applications with Docker Compose, supporting the entire development lifecycle from testing to production.
- Architected comprehensive testing framework utilizing Cypress for end-to-end testing and Vitest for unit testing, achieving 90% code coverage and reducing regression issues by 75%.
- Orchestrated complete CI/CD automation for full-stack applications with GitLab, including automated testing and database migration steps, enabling consistent deployment to Nginx servers with zero-downtime updates and automated rollback capabilities.

Dell Technologies

Cairo, Egypt

Software Engineering Intern

Feb. 2023 - Feb. 2024

- Architected and implemented a full-stack solution combining React frontend with Go microservice backend to enable dynamic search term management, increasing data collection effectiveness by 45%
- Developed and deployed a JavaScript export module enabling seamless document conversion to PDF and PPTX formats, enhancing reporting capabilities for enterprise users.
- Led code refactoring initiative for critical React component, applying SOLID principles and component composition patterns to reduce codebase from 1900 to 415 lines (78% reduction) while improving maintainability score by 65%.
- Optimized CI/CD pipeline performance through comprehensive benchmarking and infrastructure tuning, achieving 300% performance improvement and reducing build times from 12 to 4 minutes, saving approximately 160 engineering hours monthly.
- Executed strategic dependency modernization across the application stack, eliminating technical debt and enabling access to cutting-edge features while reducing bug reports by 40%.

AV Group

Alexandria, Egypt

IT Specialist

Sep. 2021 - Feb. 2023

- Spearheaded end-to-end IT infrastructure management for architectural firm, configuring and maintaining hardware/software systems for 10+ professional architects with 99.8% system availability.
- Engineered custom automation solution using Python to validate complex file structures against PDF specifications, eliminating 30+ hours of manual validation weekly.
- Implemented comprehensive task automation framework for system maintenance, backup orchestration, compliance verification, and software deployment, reducing operational overhead by 65%.
- Designed and deployed enterprise-grade server infrastructure utilizing RAID 10 configuration with Sophos Firewall integration, achieving 99% uptime and ensuring business continuity.

The Sparks Foundation

Singapore

Web Developer

Jul. 2022 - Aug. 2022

- Developed full-stack banking application using Svelte and PostgreSQL alternative (Supabase), implementing secure transaction validation system with 100% data integrity.
- Built production-ready payment processing platform integrating RazorPay API with Bootstrap UI, enabling real-time donation processing with comprehensive transaction reporting.

Information Technology Institute (ITI)

Alexandria, Egypt

Winter Trainee

Feb. 2022 - Feb. 2022

- Developed multiple iOS applications utilizing Swift and UIKit, implementing native interface components and MVC architecture principles.

Projects

Real-time Targeted Speech Enhancement

[Link](#)

- Developed as a team graduation project for Computer and Systems Engineering.
- Contributed to the development of two novel models, Personalized Fast FullSubNet (PFFSN) and Personalized Denoiser (PDenoiser), to enhance specific speaker audio.
- Designed models with real-time operational constraints, achieving a low real-time factor (RTF) of 0.21.
- Contributed to achieving competitive results in the DNS Challenge 2023, with the PDenoiser model ranking 2nd overall among submissions.
- Engineered a real-time desktop application with a graphical user interface (GUI) for on-device audio processing, featuring multi-threading and adjustable frame size for optimized streaming.
- Independently collected and meticulously curated a custom Arabic dataset for personalized speech enhancement, comprising over 83 hours of recorded speech from 30 speakers.

Monkey Lang Interpreter

[Link](#)

- Implemented a robust interpreter for the Monkey programming language from scratch.
- Added a macro system to the interpreter for meta-programming and code generation.
- Developed a complete and functional REPL (Read-Eval-Print Loop) for interactive use.
- Included support for integers, booleans, strings, arrays, and hash maps.
- Implemented core language features such as let statements, first-class functions, and closures.
- Created built-in functions to extend the language's capabilities.

Certifications

2022 **Advanced Android Kotlin Development, egFWD**

[Certificate](#)

2022 **AWS Academy Cloud Foundations, Amazon Web Services (AWS)**

[Certificate](#)

Education

Alexandria University

Alexandria, Egypt

B. Sc. in Computer and Systems Engineering