Mahammad M[redacted]

DevOps Engineer

Ms. Sc. MCSD MCDBA CKAD NVIDIA

[redacted]

SUMMARY

With over 4 years of experience as a DevOps engineer in distributed build and testing system environment, I have developed expertise in designing and implementing robust solutions across all levels, from continuous integration to continuous deployment. Additionally, I am proficient in a wide array of programming languages, including Python, C++, Lua, Julia, C#, Objective-C, Java, JavaScript, TypeScript, Assembly, COBOL, and several others.

KEY COMPETENCIES

- Strong problem-solving abilities, recognized with a 5-star problem-solving golden badge.
- Strong background with AWS, Azure, Google Cloud, and other cloud platforms for infrastructure automation and scaling.
- Proficient with Docker, Kubernetes, and other container orchestration tools for managing scalable microservices.
- Expertise in automating workflows, infrastructure management, and environment provisioning using scripting languages like Python, Bash, and DOS.
- Proficient in designing and implementing and managing monitoring solutions to ensure system health and performance optimization.
- Deep knowledge of Git and other version control systems for collaborative code management and continuous deployment.
- Ensuring secure development practices, managing vulnerabilities, and applying security patches throughout the software development lifecycle.
- Skilled in identifying bottlenecks, optimizing server performance, and ensuring system reliability under high-load conditions.
- Strong knowledge of Agile methodologies, DevOps culture, and best practices for improving collaboration and efficiency across teams.
- Experienced in designing fault-tolerant systems that scale efficiently, ensuring 24/7 availability and minimal downtime.
- Strong coding skills in Python, C++, Java, JavaScript, TypeScript, and more.
- Skilled in managing multiple priorities, meeting tight deadlines, and working independently with minimal supervision.
- Creative thinker, adept at assessing situations and generating innovative solutions.

JOB SUMMARY

ChaiBio	DevOps Engineer	2015	2020
Expandium (VIAVI solutions company)	Senior C/C++ Developer– Architect	2021	2022
oDesk- eLance- Upwork	Developer	2009	recent
CIT Global-MobiDiv (IMAGiNET)	Technical Lead	2006	Mar2009
Harf Information Technology	Senior Software Developer	2002	2006

WORK HISTORY

Expandium- VIAVI Solutions **2021- 2022**

Senior C/C++ Developer - Architect

Fixed issues and coded at the lowest level of the GSM-R stack. Developed tools.

CHAIBIO, USA Oct**2015-** Aug**2020**

DevOps Engineer, remotely, chaipcr

- Embedded Linux programming and contributing to OpenPCR open source.
- Automate the building process.
- Contributing to openPCR opensource.
- Setting and administrating Jenkins and automation tools.

Upwork, online **2009- Current**

Contractor, outsourcing

Coding under Upwork, oDesk, RAC, GAF and eLance platforms.

- Medical Devices
- GPS Application.
- Parental control applications.
- Face recognition and skin recognition.
- Advanced word processors.
- QR and Barcode scanners.
- Vuforia 6D camera drivers.
- Metatrader 4 experts, MT5 SDK Integration.
- Drivers for camera and other devices.
- PCB, PCBA, IoT and automation.
- Anti-spy apps.
- Blackberry meetings control.
- 2D games.
- eLinux development.
- Designing ARM based devices.
- Reverse engineering.

I developed in many fields. The most recent is the mobiles and embedded fields. Plus delivering of 100s of other applications, drivers, servers, and games on Symbian, Mac, iPhone/iPad, Bada, Android, WM/CE/WP, Blackberry, eLinux, and PCs. Also designed many ARM Cortext A8 based devices in several fields like the medical, automotive, sport, sailing, and others.

CIT Global, Cairo, Egypt **2006- Mar 2009**

Technical Lead, MobiDiv (previously IMAGiNET)

- Extensive on-screen keyboards experience.
- Programming embedded devices.
- Leading teams have more than 6 developers and team leaders.
- Manage and supervise projects and support teams within the company.
- Technical lead and developer for many projects centered on mobility services and BiDi middle eastern languages support over windows mobile.

Senior Software Developer, MobiDiv

- Embedded VC++ developer on a team that is responsible for several products. The applications are all for BiDi and middle astern languages support on windows mobile.
- Designed and developed tens of windows mobile 5/6/6.1 drivers and applications that with Embedded Visual C++ 4/5.
- Programming Bluetooth devices.
- Pocket PC telephony system services.
- Low-level P2K development for Motorola phones.
- ARM7 Assembler programming.
- Hardware drivers for several embedded devices.

Harf Information Technology, Cairo, Egypt **2002-2006**

Senior Software Developer, Systems and Applications Department

- Developed Windows C++ applications for a department responsible for multiple products, with a focus on supporting Middle Eastern cultures. This included work at both the kernel level (e.g., kernel hooks) and user interface development.
- Programmed embedded devices using C, C++, and Java across various platforms, including WinCE, Symbian, and MIDLet.
- Designed and implemented algorithms for floating-point and fixed-point calculations related to Sun and Moon movements, Magnetic Declination, and calculating prayer times and direction.
- Developed tools, applications, and web services for various company projects using C, C++, and Java.
- Worked across multiple platforms, including Windows, MacOS (8/9/X), Symbian, Palm, and J2ME.
- Applied object-oriented design principles and programming throughout projects.
- Successfully delivered most of my managed projects on time and within budget.
- Supervised two programmers and several non-technical staff members.
- A full list of projects is available upon request.

EgyCom, Cairo, Egypt **2001- 2002**

Tools Programmer, Development Department.

- Developing tools for different company needs mainly with Visual C++, in fields of Data manipulation, Data mining, Arabic text processing, information extraction, and automatic translation.
- Support the development of linguistic resources (e.g., grammars and lexicons), tools for corpus analysis, text classifiers, and information extraction.

Healthy Information Technology (HIT), Cairo, Egypt **2000- 2001**

Programmer

- 3D reconstruction of medical images giving a diagnostic tool for doctors.
- Designed and developed several Windows applications that work over DICOM network. Applications were made with Delphi. Lower layer was in C++, a direct translation, and port of working Unix C++ code in the original unit to a Windows, Visual C++ and Borland Delphi programming environments.
- Medical image archiving and communication over TCP/IP and DICOM networks. (DICOM: Digital Imaging and communication for medicine.)
- Implementing user interface over CTN code for Print, Query Retrieve, Store, and other DICOM services.
- Trained in various emergency situations for network administration, and implementation.
- Reading/Write DICOM DIR services.
- C++ control modules coupled with Delphi components and user interface.

Elecyr Corporation, U.S.A **Jan2014- Aug 2014**

Beaglebone Programmer

- Programming energy controlling cards with C, and Node.JS.
- Porting and back porting linux drivers.
- Building new eLinux images.

Prior experience available on request **1988- 2000**

EDUCATION HISTORY

Master of Science, Information Technology — 2005

Institute of Graduate Studies and Research- University of Alexandria- Egypt

Using machine vision in automatic agricultural products classification. Designing and implementation of an intelligent algorithm can simulate labor's vision system in classification of export oranges to be used in automatic sorting and classification, for an export station in Damanhour- Egypt. Thesis title: Image Intelligence and its Applications in surface visual defects detection in Agricultural products.

Professional Certificate In Computer Systems and Applications — 1997

CACE- The American University in Cairo- Egypt

Two years diploma in computer programming and applications.
Cumulative GPA 3.72

Diploma of Business Administration — 2001

Faculty of Commerce, Aienshams University- Egypt

Two years post graduate studies in administration. Specialized in crises management. Grade: Good. Dissertation title: survey for worms and its severity, and data protection techniques.

Professional Training

Several professional courses and certificates in software engineering, marketing, Agility, management, MCP, CMM, PMP, Embedded Linux, RTOS and other fields.

Bachelor of Science, Agricultural Engineering — 1995

Faculty of Agriculture- University of Alexandria- Egypt

Dissertation title: Design and develop computer software model to apply advanced operational research methodologies to effectively plan huge landscape projects. Developed with QuickBasic 4.5.
Project grade: Excellent.
Overall grade: Very Good (from department top ten).

Microsoft Certified Professional — 2006

Microsoft Certified Solution Developer (MCSD).
Microsoft Certified Database Administrator (MCDBA).
Microsoft Certified Technology Specialist (MCTS):

- SQL Server 2005.
- Microsoft Windows Mobile 5.0 Application Development.
- Microsoft Windows Mobile 5.0: Configuration.

Transcript: https://learn.microsoft.com/en-us/users/mahammad/transcript/dgogji6w6p6810j

nVIDIA Certificate of Competency — 2024

nVIDIA Deep Learning Institute

Accelerating End-to-End Data Science Workflows
GenAI Prompt Engineering

KCAD Kubernetes for Developers — 2024
The Linux Foundation

HONORS AND PRIZES

- Granted merit-fellowship at all full time semesters at The American University in Cairo during my certificate.
- Granted merit-fellowship at all my college years at University of Alexandria after the first year, and scored from the top ten students over my department.
- Graduated with honors and scored "Excellent" through all my secondary school semesters, and the first person graduated in 10 months earlier than the regular secondary school schedule. (American education system)
- The first granted ideal employee reward in Harf Information Technology.
- Granted a round-trip to the holiest places on earth as a merit-prize while working for Harf Information Technology.
- Rated of the top coders on different freelancing websites. Examples:
  - Badged "TopCoder Plus" on Upwork for a 100% project completion rate and 5/5.
  - Rated 10 of 10 on GetAFreelancer website.
  - 5 stars, level#13 provider on eLance website.
  - Rated "Top Coder" on RentACoder website.

TECHNICAL SKILLS

IDA, Ghidra, x32Dbg, Vuforia drivers, GSM, DevOps, Linux, Jenkins, TensorFlow, Embedded Linux, BeagleBoard, Raspberry Pi, Symbian OS, MIDLet, PocketPC, WinCE, J2ME, J2EE, CISCO VoIP, Machine Vision, Image Processing, Artificial Intelligence, EPOC, 3D Reconstruction, 2D/3D Rendering, OpenGL, Encryption, Device Programming, Archive Servers Communication (TCP/IP), ActiveX, COM+, Arabization, DICOM Services, CMM, Fixed-Point Calculations, CDMA, JSP, GIS, Web Services, .NET, SOAP, Eris, Nokia, WAP, Object-Oriented Design, Hardware Drivers, BREW, Motorola P2K, WML, XML, ARM7, Mobile Development, Natural Language Processing, Arabic Text Processing, PMP, iPhone, Android, BlackBerry, iPad, HL7, PACS, C++17, Game Development, VR Engines, I2C, SPI, UART, CSI.

PERSONAL

Born 1974 in Cairo, Egypt.
Citizen of Arab Republic of Egypt.
Fluent in Arabic and English.