

MARWAN ELGENDY

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Summary :

Software Engineering Manager with 15+ years of experience building and scaling cloud-native, data-intensive platforms and leading high-performing engineering teams. Proven track record of delivering complex systems across cloud infrastructure, distributed systems, and full-stack applications while balancing technical excellence with people leadership. Experienced in mentoring engineers, driving engineering best practices, collaborating cross-functionally with Product and DevOps, and translating business goals into reliable, scalable software solutions.

Technical Skills :

- **Programming Languages:** Java, Python, Ruby, JavaScript, Scala, Golang, C/C++, PHP.
- **Cloud Platforms & Technologies:** AWS (EMR, SFN, Lambda, EC2, SQS, SNS, Redshift, DynamoDB, API Gateway), Docker, Kubernetes, Splunk, Terraform.
- **Databases:** PostgreSQL, MongoDB, MySQL, Oracle, SQLite, NoSQL.
- **Methodologies & Practices:** Agile (Scrum, Kanban), Domain-Driven Design, Test-Driven Development (TDD), CI/CD, DevOps.
- **Other Skills:** Machine Learning, Data Analysis, RESTful APIs, Linux/Unix administration, Embedded Systems, Networking and Infrastructure, Bash & Shell Scripting.

Professional Experience :

Senior Software Engineer **Apptio (an IBM company)** May 2023 – June 2025

- Designed and delivered scalable data-processing pipelines for high-volume usage and financial datasets using Kubernetes and Java, migrated targeted workloads to EMR Spark with Scala to improve performance and cost efficiency.
- Implemented Infrastructure-as-Code using Terraform to reliably provision, manage, and version AWS cloud environments.
- Built robust automation workflows with AWS Lambda, Step Functions, and Python to streamline operations and reduce manual overhead.
- Performed large-scale data analysis and engineering tasks using Databricks.
- Maintained high system availability through proactive on-call support and timely incident resolution.

Senior Software Engineer **JumpCloud** Jan 2022 – Feb 2023

- Integrated Microsoft O365 using the GraphQL API, expanding platform capabilities and significantly improving user interoperability. Directed the technical design and end-to-end development ensuring seamless integration with existing system functions.
- Leveraged a diverse technology stack including Docker, Golang, gRPC, JavaScript, Node.js, PostgreSQL, and MongoDB to deliver robust, high-performance services.

Specialist Software Engineer **Hewlett Packard (HP)** July 2018 – Dec 2021

- Enhanced the financial system for Instant Ink using domain-driven design principles.
- Developed microservices and data pipelines, extensively using AWS infrastructure including Lambda, API Gateway, SNS, SQS, DynamoDB, Redshift, and CloudFormation.
- Implemented robust commerce platforms with third-party integrations across front-end and back-end.
- Fostered agile methodologies in cross-functional teams, closely collaborating with DevOps, QA, and Product Management.
- Technology stack included Ruby on Rails, ReactJS, Docker, Jenkins, Chef, Splunk, relational and NoSQL databases.

Full Stack Engineer **AT&T** March 2017 – May 2018

- Built key front-end and back-end components for a service-oriented single-page application for ticket and task management.
- Designed and implemented RESTful APIs, developed asynchronous JavaScript modules, and created custom query languages for unstructured data.
- Provided guidance and mentorship for new developers, ensuring high code quality standards.
- Leveraged technologies such as Perl, MySQL, PHP, JavaScript, Ember.js, AJAX, and SOA.

Software Development Manager **Sunrise Resorts** Jan 2014 – July 2016

- Led end-to-end implementation of asset management and digital e-signature solutions.
- Managed comprehensive IT infrastructure upgrades including VPN deployments and data center modernization.
- Deployed technologies including PHP, CodeIgniter, Bash, Bootstrap, jQuery, MySQL, Oracle, Linux, networking (layer-3 switches, firewalls).

Software Engineer **OIG Electronics** Jan 2013 - Dec 2013

- Acted as Scrum Master leading a team to develop Linux-based operating systems for embedded hardware.
- Defined and executed effective version control strategies and promoted agile practices.
- Utilized technologies including C/C++, Shell Scripting, QML, SQLite, QT, and Unix OS.

Software Developer **5D Agency** Jan 2011 – Jan 2013

- Developed engaging web-based JavaScript games and desktop gaming applications with emphasis on security and performance.
- Built comprehensive toll-station management systems with integrated image recognition capabilities using OpenCV.

Education :



Maharishi International University

- **Master of Science (MS), Computer Science**
- **Key coursework:** Big Data, Machine Learning, Algorithms, Design Patterns, Java.



Shorouk Academy

- **Bachelor of Science (BS), Computer Science**
- **Key coursework:** Game development, C/C++.