

With a foundation in engineering and an MBA, I excel in developing efficient software solutions, demonstrating a proven track record across multinational corporations and startups in the USA and Middle East. I have overseen product roadmapping and engineering execution in domains including IoT, E-Commerce, Fitness, Smart Cities and others, with a strong focus on optimizing engineering team dynamics and operational scalability. Skilled in backend, frontend, and mobile development, I've not only led teams but also actively engaged in hands-on development, particularly in crafting mobile applications and frontend interfaces. My contributions have significantly propelled company growth, successful project executions, and strategic exits. My blend of technical expertise and business acumen enables me to drive innovative solutions and organizational success.

EXPERIENCE

Engineering Manager | **CALENDRZ** | Oct, 2023 – current (contract)

- Led the engineering of Calendrz latest product “boostz”, a web application that allows online businesses to scale their audience size through seamless referrals.
- Contributed in defining the product MVP and roadmap.
- Worked hands on in developing the product frontend and APIs utilizing Angular and TypeScript.
- Worked hands on in designing the product frontend using Material Design and Figma.

Head of Mobile Development and Cofounder | **AURA SYSTEMS** | 2016 – 2023

- Successfully managed a diverse portfolio of IoT, business excellence, e-commerce, fitness, architecture, and lifestyle web and mobile apps, continuously engaging stakeholders to align with product objectives and ensuring their validation. These apps collectively served tens of thousands of users.
- Worked hands on in developing multiple products, focusing on developing mobile apps in Flutter/Dart and frontend in JavaScript.
- Optimized team performance and efficiency by implementing Scrum methodologies.
- Leveraged continuous market analysis, user feedback, and agile practices to guide product development. These efforts contributed to achieving high user adoption rates among tens of thousands of users.
- Actively engaged in stakeholder negotiations, fostering long-lasting customer relationships, and ensuring alignment with product objectives.
- Successfully oversaw numerous product launches for web and mobile apps, achieving high user adoption rates while adhering to agile timelines and stakeholder expectations. These launches contributed to the company's customer base growth to hundreds of contracted customers.
- Worked across full stack: defined, maintained, and optimized API requirements for mobile apps, ensuring data integrity, security, and backward compatibility. Also, collaborated closely with designers to define product UX/UI expectations, incorporating user feedback, and driving continuous improvements.
- Conducted code reviews, improving code quality, architecture, testability, and maintainability.
- Mentored and coached team members for growth and development, tailoring strategies to individual needs and goals.
- Implemented a financial and product road map informed by data analysis and dashboards tracking contract values, delivered product value, expenses, and delivery times.

Engineering Manager | **ALFA ELECTRONICS** | 2013 – 2016

- Led a multi-disciplinary team, achieving a 4X increase in department revenue over 2 years using knowledge based strategic management approach.
- Streamlined product development communication, redefining the product roadmap visibility and release strategy, increasing the department product portfolio and shortening the release cycle by more than half.
- Acted as the bridge between engineering and key stakeholders, aligning product development, process improvements, and testing environments improving the relationships within the company and fostering an environment of collaboration.
- Fostered innovation through initiatives such as IoT, touch technologies, embedded software, and varied programming languages which allowed the company to enter multiple new markets previously untapped.

- Developed and maintained the departmental product roadmap to track monthly objectives and strategies.
- Improved team efficiency with ongoing performance measurement through data analysis and dashboards coupled with market trend analysis, translating findings into strategic objectives and tactics.
- Managed annual, quarterly, and monthly budgets, reporting growth indicators to upper management.
- Expanded the department's capabilities by recruiting and training more than 15 members, upgrading tools and procedures, and optimizing project allocation through better design tools, project management tools and an agile release process.
- Analyzed performance data to identify trends and areas for improvement, working with department heads to develop targeted training programs that addressed skill gaps.

Senior Software Engineer | **MENTOR GRAPHICS (SIEMENS EDA)** | 2003 – 2011

- Engaged directly in numerous development releases, utilizing C++ and Tcl/Tk.
- Served as a proactive senior member of an agile development team.
- Operated in a test-driven environment, crafting regression, unit tests, pioneering testing automation.
- Collaborated with product managers to define goals, scope, and functional/non-functional requirements.
- Played a key role in frontend/backend integration within the team.
- Designed the infrastructure, system architecture, and build scripts.
- Enhanced team capacity by recruiting new developers and refining development and testing procedures.
- Partnered with quality assurance to establish testing architecture, encompassing manual/regression tests.
- Conducted code reviews and facilitated cross-training sessions.

EDUCATION

PORTLAND STATE UNIVERSITY | PORTLAND, OR | 2010 – 2013

Master of Business Administration (MBA)

AIN SHAMS UNIVERSITY | CAIRO, EGYPT | 1998 – 2003

Bachelor of Science in Computer Engineering

KEDGE BUSINESS SCHOOL | MARSEILLE, FRANCE | 2012

International Studies | International Management and Finance

AIN SHAMS UNIVERSITY | CAIRO, EGYPT | 2004 - 2005

Post Graduate Advanced Studies | Machine Learning, Simulation, Security and Image Processing

SKILLS

Business: Stakeholder management, negotiation, product development, agile methodologies, scrum, data analysis, building cross-functional and cross-cultural teams, road mapping, budgeting, pricing, strategic development, mentorship.

Product/Project Management: Atlassian Products, Asana, Microsoft Project.

Data Analysis and Visualization: Using Excel, Pandas, NumPy, Matplotlib, Seaborn.

Programming: Python, Flutter, Dart, JavaScript, TypeScript, Angular, HTML/CSS, Bootstrap, JSON, Material Design, Rest APIs.

Tools: VS Code, XCode, Postman, Git/GitHub, Notion, Figma, Photoshop, Illustrator, Premiere, AfterEffects.

Languages: Fluent in English and Arabic.

AWARDS AND HONORS

Best Employee Award **Mentor Graphics**

Recognized for outstanding performance and contributions to the company.

Distinction with Honors **Ain Shams University**

Earned for exemplary academic achievement.

MBA with Honors **Portland State University**

Awarded for exceptional performance with a 3.9 GPA.

CERTIFICATIONS

Professional Scrum Product Owner (PSPO 1)

Scrum.org

Developing the Leader Within You 2.0

John Maxwell