

MOHAMED ACHREF BEN ABDALLAH

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PROFESSIONAL SUMMARY

Full-Stack Engineer with 3+ years of experience specializing in efficient system design and cloud architecture. Proven track record of architecting resilient AWS infrastructure (ECS, ASG), optimizing microservices for low latency, and integrating complex AI agent workflows. Expert in Next.js, delivering high-performance, scalable solutions with excellent reliability and user-experience.

TECHNICAL SKILLS

Frontend Development: HTML, SCSS, Tailwind CSS, JavaScript, TypeScript, React, Next.js, .NET Blazor, Zustand, ThreeJS, Framer Motion, Zod

Backend & Databases: Express.js, ASP.NET Core, FastAPI, C#, Python, Django, Encore.go, Golang, PostgreSQL, MongoDB, Redis, Celery

AI/ML: OpenAI, LangChain, LangGraph, LangSmith, Temporal.io, AI SDK, LlamaIndex, Prompt Engineering, Vector Databases, LLM Orchestration, ChromaDB, Model

Context Protocol (MCP)

Cloud & DevOps: AWS (VPC, EC2, Fargate, ASG, RDS, S3, etc), Azure, Docker, Docker Compose, CI/CD, AWS CLI, Infrastructure as Code

Testing: Jest, React Testing Library (RTL), Puppeteer, Unit Testing, Integration Testing, End-to-End Testing

Other: Git, Unity, VR Development, UI/UX Design, Figma, Design Patterns, OAuth 2.0, JWT

CERTIFICATIONS

Microsoft: Azure AI Fundamentals (AI-900) May 2024

Microsoft: Mixed reality digital twins with Azure Digital Twins & Unity March 2024

Microsoft: Azure Fundamentals (AZ-900) March 2024

Unity: VR Development by Unity Technologies January 2024

Microsoft: Foundational C# September 2023

Pluralsight: DevOps - The Big Picture August 2023

Cal Arts: Graphic Design Fundamentals September 2022

Udemy: A Path to Effective Communication August 2023

Unity: Unity Essentials Pathway July 2022

PROFESSIONAL EXPERIENCE

AI Engineer

Lameh AI

February 2026 - Present
Building production AI systems

- The New Edge in Financial Services. Building the future of finance with AI.

Technologies: AWS, AI Agents, LangChain, LangSmith, Temporal.io

Software Engineer

HeloSolutions

May 2025 - March 2026
AI and Cloud Infrastructure Specialist

- Architected resilient cloud deployment for cybersecurity AI agent platform on AWS (ECS, EC2 ASG); configured dynamic auto-scaling for on-demand Kali Linux containers and engineered "RunTask" API for programmatic environment spawning.
- Engineered high-performance Go microservice replacing AWS NLB with deterministic hash-based routing; guaranteed sticky sessions and prevented data leakage via JWT, optimizing low-latency WebSocket/HTTP traffic.
- Architected RAG system for cybersecurity platform indexing 33,000+ chunks in ChromaDB; designed multi-service pipeline (Next.js/Node.js/Python) enabling semantic search, improving context-aware responses for technical queries.
- Integrated OAuth 2.0 for Model Context Protocol (MCP) servers, enabling user-scoped access to third-party services (GitHub, Linear); centralized token management via Supabase (with RLS) for encryption and automatic refresh.
- Engineered AI-native legal platform using Next.js and Django, building agentic editor for autonomous editing/redlining; implemented evaluation framework to benchmark frontier models on complex legal contracts.
- Automated production infrastructure with multi-stage environments (Dev/Test/UAT/Prod) via AWS CloudFormation, optimized asynchronous processing by 60% with Celery/Redis, and deployed high-fidelity template engine for seamless DOCX/HTML/PDF conversion.
- Developed responsive UI components using Next.js 15, TypeScript, and Tailwind CSS; created visualization tools including real-time terminal streams, browser automation views, and prompt management systems.

- Built intelligent invoice recovery automation with Next.js and Trigger.dev, deploying AI-driven SMS/email outreach to analyze payment history and manage overdue receivables exceeding \$10M+.

Technologies: AWS (Route 53, ECS, CloudFormation, RDS, S3, etc), Docker, Go, Python (Django/Flask), Next.js, TypeScript, Tailwind CSS, ChromaDB, Redis, Celery, MCP, Trigger.dev, OpenTelemetry

Software Engineer

June 2024 - May 2025

Bookme OÜ

Full-Stack Developer with AI Integration Focus

- Spearheaded development of RAG system using SQS, OpenAI and Pinecone, achieving 50% faster document processing.
- Engineered high-performance Next.js 14 interfaces with Tailwind CSS, achieving 90% Lighthouse score and reducing page load time from 3s to 1.5s
- Architected real-time analytics system using Google Analytics and Apex Charts, enabling data-driven decisions that increased user retention by 25%
- Optimized AWS cloud infrastructure by analyzing compute costs and right-sizing, reducing monthly operational costs by 50% while maintaining 99.9% uptime.
- Implemented WebSocket-based notification system, reducing average user response time.

Technologies: Next.js 14, React, TypeScript, Tailwind CSS, AWS Cloud, OpenAI, LangGraph, AI SDK, Jest, RTL

Solutions Developer

January 2024 - June 2024

Forvia (through Tessian Group)

VR Development Specialist

- Developed industrial VR training modules using Unity Engine, achieving 90+ FPS and doubling employee satisfaction.
- Engineered custom VR interactions with haptic feedback, increasing user engagement by 50% and reducing training errors by 35%
- Automated Azure DevOps and Power BI reporting system, reducing reporting time from 5 minutes to 30 seconds for 100+ team members
- Optimized VR application performance, reducing load times from 45s to 30s and improving frame rate consistency by 20%

Technologies: C#, Unity Engine, Unity XR Interaction Toolkit, Python, Azure DevOps

Blazor Developer

December 2023

Forvia (through Tessian Group)

Web Application Developer

- Architected high-performance .NET Blazor application, achieving 95% Lighthouse accessibility score and reducing page load time from 4s to 2s
- Engineered comprehensive design system with reusable components, reducing development time by 35% and ensuring pixel-perfect UI consistency
- Implemented responsive layouts with Bootstrap 5, improving mobile conversion rate and reducing content layout shift.

Technologies: C#, .NET 8, Blazor, Bootstrap5, JavaScript, CSS, Razor, EF Core, Docker

Full-Stack Developer

June 2023 - September 2023

TSI

Inventory Management System Developer

- Developed QR-based inventory system, reducing login time for seasonal workers by 80% and decreasing authentication errors by 90%
- Built Angular-based management interface, improving administrative efficiency by 45% and reducing data entry errors by 60%
- Implemented barcode scanning functionality, reducing inventory errors by 60% and improving stock tracking accuracy by 75%

Technologies: C#, ASP.NET Core, Angular, .NET Maui, EF Core, MS SQL

Creative Developer

May 2023 - June 2023

Chilift

Frontend and UI/UX Specialist

- Developed high-converting landing page using React and Tailwind CSS, increasing conversion rate by 35% and reducing bounce rate by 40%
- Designed mobile app UI with 95% user satisfaction rating in usability testing and 40% faster task completion rates
- Implemented comprehensive testing suite, achieving 100% component test coverage and reducing bug reports by 60%

Technologies: React, Tailwind CSS, Framer Motion, SCSS, Spline 3D, Jest, RTL

Web Developer

January 2023 - May 2023

AJico Group

Full-Stack Web Developer

- Developed event website with 10K+ visitors during the event period and 10% increase in attendee engagement
- Implemented real-time communication features and beautiful reporting UI, improving attendee satisfaction and reducing support tickets by 50%
- Created brand assets and guidelines, establishing consistent visual identity across 10+ marketing channels

Technologies: React, Chakra UI, SCSS, Express.js, MySQL

Co-Founder & Game Developer

March 2022 - June 2023

RedSpear

Game Developer

- Developed C# gameplay systems achieving 60 FPS on target platforms and reducing memory usage by 40%
- Implemented Python AI scripts, enhancing team productivity more than 50% by automating game development tasks
- Optimized game assets, reducing load times and improving overall performance by 25%

Technologies: C#, Unity Engine, Figma, Python, Machine Learning, GPT-2, Git LFS

Junior Web Developer

August 2022 - January 2023

CIN Group

Investment Platform Developer

- Developed secure investment platform with 99.9% uptime and zero security incidents.
- Implemented i18n internationalization, expanding market reach to 2 new countries and increasing user base by 200%
- Optimized database queries, reducing response time by 70% and improving concurrent user capacity.

Technologies: React, Chakra UI, Framer Motion, i18n, Express.js, PostgreSQL, PL/pgSQL

Junior Web Developer

June 2022 - August 2022

Smart Kokusai

Web Developer

- Developed React-based websites with engaging animations, increasing user engagement by 20%
- Created Express.js API with MySQL integration, improving data retrieval speed by 200% compared to manual methods.
- Designed UI/UX concepts and branding assets, establishing consistent visual identity

Technologies: React, Framer Motion, CSS Animations, Chakra UI, Express.js, MySQL, Figma, Adobe Creative Suite

EDUCATION

Institut Supérieur des Technologies de l'Information et de la Communication

Bachelor's degree, Computer Science