Muhammed Mubashir Siddiqui

Senior Full-Stack Engineer

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Summary

Full stack engineer with 6 years shipping production systems in Node.js and TypeScript. Sole backend architect for a Dubai government IoT platform spanning water, oil and gas, temperature, fleet and worker safety telemetry NestJS services on AWS, PostgreSQL schema and query design, and queue driven pipelines built for failure, with retries, idempotency and dead letter handling. Also builds AI systems that run unattended multi agent workflows, MCP servers, skills and connectors, voice agents, and internal knowledge systems that put company data behind natural language queries, with evaluation loops to keep output trustworthy.

Experience

AHOY Senior Full Stack Engineer & Project Lead · Nov 2025 - Present

- Sole backend architect for Spectrum of Life (SOL), a Dubai government IoT platform monitoring water, oil and gas, temperature, vehicle fleets and worker safety equipment NestJS and TypeScript services, PostgreSQL data model, and AWS infrastructure across multiple environments.
- Built the real time ingestion pipeline carrying telemetry from field sensors and trackers (ChirpStack to AWS SQS), designed around failure modes retries, idempotent consumers and dead letter queues, so no reading is lost or double counted.
- Designed the SQL schema, indexes and migrations behind time series telemetry from several device types, and tuned the queries backing customer facing dashboards.
- Split the platform into services with clear boundaries, containerised with Docker so the full multi-service stack runs locally with one command.
- Project lead for a team of 7+ across web, backend and mobile scoping features with government stakeholders, reviewing code, and setting the automated-test bar for every service.

Freelance · AI Engineer · Aug 2026 - Oct 2026

- Built internal knowledge systems ("second brains") for companies including Infosysta, pulling finance and project data into one place their teams query in natural language.
- Automated repetitive internal workflows end to end with MCP servers, agent skills and connectors.
- Voice enabled AI sales team: coordinated agents covering lead generation, lead research, inbox handling and outbound email, with ElevenLabs voice agents handling live calls.

Studio Alchemy · Senior Software Engineer · Mar 2025 - Nov 2025

- Led the end-to-end build of TinyTography, a generative-AI product that turns phone photos of newborns into studio-quality portraits, on Next.js (SSR/CSR) with Supabase for real-time data and auth.
- Designed the AI pipeline Astria AI plus in-house supervised models chained into a multi-step workflow (upscaling, background generation, watermarking) run as background jobs with retries and status tracking.
- Built an evaluation loop that scored sample outputs against a fixed reference set before any prompt or model change shipped.
- Shipped the product around the models multi-role order management (admin, customer, photo editor), Intercom support and ticketing, and CI/CD with zero-downtime deploys.

Algoace · Full-Stack Developer · Jan 2022 - Mar 2025

- Built serverless AI image generation pipelines on AWS Lambda, halving processing time.
- Owned MySQL and MongoDB schema and query optimisation, cutting query response times by roughly 30%.
- Managed AWS and GCP infrastructure, reducing cost around 15% through resource right-sizing.

Appick · Frontend Developer · Jan 2021 - Dec 2021

- Built a reusable React component library from Figma designs, cutting feature build time across the team by about half.

Skills

AI & LLM - agent systems (MCP servers, skills, connectors), agentic workflows, prompt design, evals and output scoring, voice agents, Claude Code, Codex, Hermes Agent, OpenClaw, ChatGPT, Dots, used daily to ship production code

Languages & frameworks - TypeScript, JavaScript, Node.js, NestJS, Express, React, Next.js

Data - PostgreSQL, MySQL, MongoDB, schema design, indexing, migrations, transactions, query optimisation, ORM trade offs

Cloud & infrastructure - AWS, GCP, Docker, CI/CD, microservices, REST APIs, ChirpStack / IoT ingestion, Supabase, Firebase, Agile and Scrum

Education

University of Florence - MSc, Software Science and Technology · expected 2027

DHA Suffa University - BS Computer Science · 2020 - 2024