MAHYAD MIRZABAGHERI

Software Engineer | Web Developer | Python · AWS · Docker
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PROFESSIONAL PROFILE

Software Engineer with an **MSc in Software Engineering (Distinction)** from the University of Staffordshire and **nearly 10 years' industry experience** in IT, including building and maintaining business websites and web applications – two of which are live today (arvinbokhar.ir and mananshahidi.ir). Built an open-source, cloud-native analysis framework as an MSc dissertation using Python, FastAPI, Docker and AWS serverless patterns. Strong in web and mobile development (85% module mark), cloud computing and DevOps in AWS. Brings a support background that means writing reliable, well-documented software and understanding how real users work. Quick learner, comfortable in Agile teams, and keen to grow in a junior or graduate software or web developer role.

TECHNICAL SKILLS

- **Languages:** Python, C#, JavaScript, TypeScript, HTML5, CSS3, SQL, Java (working knowledge)
- **Frameworks & Web:** FastAPI, REST APIs, .NET MAUI (MVVM), Next.js, React, Tailwind CSS, WordPress, WooCommerce, Elementor, WPML (multilingual, RTL/LTR), responsive web design, web and mobile application development
- **Cloud & DevOps:** AWS (Lambda, S3, DynamoDB, SES, API Gateway, Step Functions, SAM, VPN and VPC networking, virtual private servers), Docker, Docker Compose, Nginx, CI/CD, Git/GitHub
- **Data:** PostgreSQL, MySQL, Redis, MinIO (S3-compatible storage), data analysis with Python
- **Practices:** Agile/Scrum, DevOps, automated testing (xUnit, pytest, Vitest), static code analysis (SonarQube, ArchUnit, Roslyn), microservice architecture, software design patterns, technical documentation
- **Infrastructure:** Windows, networking fundamentals (TCP/IP, DNS, DHCP, subnetting), active and passive network infrastructure

PROJECTS & LIVE PORTFOLIO

Microservice Anti-Pattern Detector – MSc Dissertation **2025**
github.com/Mahyadmi/microservice-antipattern-detector

- Designed and built a cloud-native framework that automatically detects design problems (anti-patterns) in microservice systems by combining SonarQube, ArchUnit and Roslyn static analysis.
- Implemented the API service in Python with FastAPI, backed by PostgreSQL, Redis and MinIO, with an Nginx-served web dashboard, all orchestrated with Docker Compose.
- Architected it as a simulation of an AWS serverless design (Lambda, Step Functions, S3, API Gateway) so it can be moved to AWS without redesign.
- Evaluated it on four open-source projects in Java, Node.js, Go and .NET (incl. Spring PetClinic, Sock Shop, eShopOnContainers), achieving 100% precision.

Arvin Bokhar – Multilingual Corporate Website **Live**
WordPress · Elementor · WPML | *arvinbokhar.ir*

- Designed and built the website for an industrial boiler manufacturer in six languages (Persian, English, German, Russian, Turkish, Arabic) with right-to-left and left-to-right layouts, a products and services catalogue, project showcase and enquiry forms.
- Continue to maintain it: SEO, security hardening (firewall IP blocking) and performance optimisation with WP Rocket caching.

Manan Shahidi – Online Clothing Store **Live**
WordPress · WooCommerce | *mananshahidi.ir*

- Designed and built a Persian (right-to-left) WooCommerce store for a clothing brand: product catalogue browsable by size, cart, wishlist and customer accounts, a mobile-first layout with bottom navigation, and WhatsApp and Instagram integration.

Simple Bank App – Cross-platform .NET MAUI **MSc module**
github.com/Mahyadmi/SimpleBankApp

- Banking app for Android, iOS, macOS and Windows with two-factor email sign-in, transfers, admin approval for large payments and fraud alerts for transfers from new locations.
- Refactored into a layered MVVM codebase with a UI-free core library (C#, SQLite, PBKDF2 password hashing) covered by 57 xUnit tests running in GitHub Actions.

Secure One-Time File Sharing – AWS Serverless **MSc module**
github.com/Mahyadmi/secure-file-share-aws

- Files upload directly to encrypted S3, the recipient is emailed via SES, and an atomic DynamoDB update guarantees each link downloads exactly once before it expires.
- Whole stack defined as infrastructure as code with AWS SAM (Python, Lambda, API Gateway); 36 automated tests with moto-mocked AWS in CI; built using Scrum.

DoseRelay – Bilingual Care Web App **Live**
mahyadmi.github.io/dose-relay | *Next.js · React · TypeScript*

- Private English/Persian (RTL) app for families sharing a parent's care: double-dose warning, shift handover screen and end-to-end encrypted share links (Web Crypto, AES-GCM) with no server or accounts; offline PWA with 29 Vitest tests.

EDUCATION

MSc Software Engineering – Distinction **2024 – 2025**
University of Staffordshire | Stoke-on-Trent, UK

- **Modules:** Web and Mobile Application Development (85%), Cloud Computing (72%), DevOps and Agile Software Development in AWS (71%), Dissertation (69%), Research Methods (68%), Critical Systems and Applications (67%), Software Engineering Principles and Practices (65%).

BSc Computer Engineering **2012 – 2016**
Islamic Azad University, Tehran North Branch | Tehran, Iran

PROFESSIONAL EXPERIENCE

IT Specialist – Web Development & IT Support **2017 – 2024**
Arvin Bokhar Heating Industries (Manufacturer) | Tehran, Iran

- Built and maintained business websites and web applications, including the company's multilingual site arvinbokhar.ir, working with staff to turn their requirements into working features.
- Wrote diagnostic test scripts to identify faults quickly and documented solutions in a shared knowledge base.
- Set up virtual private servers and VPN connections, and maintained the network infrastructure that business systems depended on.
- Provided 1st and 2nd line support for Windows and Microsoft 365 users, explaining technical issues in clear, non-technical language.

WordPress Developer (Part-time) **2015 – 2016**
Farstech Co. | Tehran, Iran

- Designed, built and maintained WordPress client websites, including themes, plug-ins, SEO and post-launch maintenance.

Sortation Associate **Oct 2025 – Present**
Amazon UK Services Ltd, DST1 Delivery Station | Stoke-on-Trent

- Work in a high-volume, deadline-driven operation using Zebra handheld devices, following strict safety and quality processes. Also seasonal at the same site Nov 2024 – Jan 2025.

Kitchen Host **Jan 2025 – Oct 2025**
Aramark, Alton Towers Resort | Staffordshire

- Teamwork and customer service in a fast-paced environment while completing the MSc.

CERTIFICATIONS & TRAINING

- IBM / Coursera – Python for Data Science, AI & Development (Credential ID: GG2DTE2HXQGS)
- IBM / Coursera – Databases and SQL for Data Science with Python (Credential ID: UCT9MN2EDW8E)
- IBM / Coursera – Data Science Methodology (Credential ID: 6KLVRPZ7J6T5)
- IBM / Coursera – What Is Data Science? (Credential ID: ZJXHUF4F7BNJ)
- Coursera – Get Started with Figma (Credential ID: XMWUPWDYHHHC)

ADDITIONAL INFORMATION

- Languages: English (fluent), Persian (native).

References available on request.