JAYANGA CHANDRAKUMARA

Senior Full Stack Software Engineer | C# · .NET Core · Microservices · DDD | Azure · Kafka · SQL Server | Angular

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linkedin.com/in/jayanga-chandrakumara | Portfolio: **jayangachandrakumara.com** | Availability: Immediate

SUMMARY

- Senior Software Engineer with **9+ years of experience** designing, building, and supporting enterprise applications using C#, .NET Core, microservices, Clean Architecture, Kafka, Azure, SQL Server, and Angular across government, banking, and international client environments.
- Most recently worked on **Singapore's National Tax Systems Modernisation Programme at IRAS** across the Individual Tax and Enforcement domains, designing and developing external REST APIs, Kafka event-driven services, large-scale batch jobs, Angular front-end components, and Azure Pipelines CI/CD solutions.
- Experienced in **leading SIT, UAT, ORT exit, and release activities** in regulated tax and banking environments, including IRAS and UOB, as well as owning production support, root-cause analysis, defect resolution, and system stability for the IRAS Enforcement domain.
- Previously served as a **Lead Full stack Developer** (2019–2021) at a Sri Lankan software company, delivering platforms for end clients in Spain, leading code reviews, and establishing coding standards across the team. Delivered projects with stakeholders across Singapore, Spain, the UK, Ireland, France, and Australia.

TECHNICAL SKILLS

Backend: C#, .NET 7/8, .NET Core, ASP.NET Core Web API, ASP.NET MVC, .NET Framework, RESTful APIs, JWT authentication, Entity Framework Core, Entity Framework, LINQ, SignalR, Elsa Workflow, Swagger

Messaging: Apache Kafka (Confluent), Event-Driven Architecture, Publish/Subscribe Messaging

Cloud & DevOps: Microsoft Azure (AKS, API Management, Key Vault, Blob Storage), Azure Pipelines, Azure Application Insights (monitoring & observability), Docker, Kubernetes, Jenkins, SonarQube, JFrog, Control-M, ALDON

Data: SQL Server, Stored Procedures, Query Performance Tuning, Redis (in-memory NoSQL caching), MySQL

Frontend: Angular, TypeScript (3+ years), JavaScript, jQuery

Architecture: Microservices, Domain-Driven Design (DDD), Clean Architecture, Event Sourcing, Design Patterns

Leadership: Technical Leadership, Code Reviews, Mentoring, Stakeholder Management, Release Management

Delivery & Tools: Unit Testing (xUnit), SIT/UAT/ORT, Agile/Scrum, Git, AI-assisted development tools (GitHub Copilot, Claude Code, ChatGPT), Bitbucket, JIRA, Azure DevOps

PROFESSIONAL EXPERIENCE

Inland Revenue Authority of Singapore (IRAS) – Senior Software Engineer
Oct 2023 – Oct 2026

Contract via Avanade (engaged through Apar Pte Ltd) · Singapore

Singapore's National Tax Systems Modernisation Programme, including the myTax Portal, the secure platform taxpayers use to manage their income tax transactions.

- Delivered high-traffic external REST APIs and C#/.NET 7/8 microservices for the Individual Tax platform, integrating public-facing tax portals with internal systems, business services, and batch-processing components. Deployed stateless services on AKS behind Azure API Management with JWT authentication, and developed Angular front-end features integrated with the same APIs.
- Engineered fault-tolerant, large-scale batch-processing pipelines handling millions of records per run, designing chained and chunked workflows in which each job's output fed the next, with controlled sequencing, data integrity and consistency between stages, and safe recovery and reprocessing after failures.
- Built event-driven microservices using Apache Kafka (Confluent) applying Event Sourcing principles to publish and consume business events across distributed services, improving service decoupling, data consistency, and fault tolerance.
- Improved database and batch-processing performance by optimising SQL Server queries and Entity Framework Core data access, and caching frequently used code-table and control-table reference data in Redis for high-volume workloads.
- Eliminated race conditions and duplicate processing by implementing thread-safe concurrency patterns, including async/await, optimistic concurrency, and idempotent consumers, improving data consistency, reliability, and fault tolerance across distributed services.
- Safeguarded production stability and availability for the Enforcement domain using Azure Application Insights for log analysis, exception tracking, distributed tracing, and performance monitoring to detect and diagnose issues early; led end-to-end incident management, including initial issue investigation, root-cause analysis, permanent defect fixes, and post-incident reviews to prevent recurring production issues.
- Adopted AI-assisted development tools, including GitHub Copilot, Claude, and ChatGPT, to improve delivery speed, using prompt-engineering templates for test generation, refactoring, and documentation, along with a security and maintainability review checklist for AI-generated code.
- Raised engineering standards by mentoring junior developers and leading API design, Clean Architecture practices, technical documentation (Swagger API specifications, solution designs, and operational guides), code reviews, and technical decision-making.
- Raised release quality and security across the Individual Tax and Enforcement domains by owning SIT, UAT, and ORT exit activities; automated builds, xUnit testing, SonarQube static code-quality and security scans, and deployments through Azure Pipelines CI/CD, using Azure Key Vault for secrets management and following secure-coding practices for regulated environments.
- Contributed to Agile Scrum sprint planning by refining and estimating stories and tasks, identifying technical risks, and supporting delivery across distributed teams.

Tech Stack: C#, .NET 7/8, .NET Core, REST APIs, Microservices, Domain-Driven Design (DDD), EF Core, SQL Server, Redis (caching), JWT authentication, Apache Kafka (Confluent), Azure (AKS, API Management, Key Vault, Application Insights, Azure Blob Storage for object storage and large file handling), AI-assisted development tools (GitHub Copilot, ChatGPT, Claude), Docker, Kubernetes, Azure Pipelines, xUnit, SonarQube, Git, Angular, SignalR, Clean Architecture, Event Sourcing.

United Overseas Bank (UOB) – Senior Software Engineer
Jun 2022 – Sep 2023

Contract via Solderfield Pte Ltd · Singapore

UT Product Master: an enterprise web application used by Product Managers and Operations teams at a leading Singapore bank to create, configure and maintain Unit Trust (investment fund) products and fund parameters. It covers fund houses, fee matrices, transaction limits and interfaces to downstream banking systems.

- Developed Iteration 3 (Singapore) of the UT Product Master application as an embedded vendor engineer partnering with UOB Product Managers and Operations teams, building features with C#, ASP.NET MVC, SQL Server, Entity Framework and Elsa Workflow.
- Led SIT and UAT releases for Iteration 3 and supported UAT delivery for Iteration 4, coordinating deployments, environment readiness, defect closure and exit activities, including root-cause investigation, implementation and unit testing of fixes, and production deployment support.
- Developed business functionality, workflow processes and data-access components, integrating Unit Trust product data with downstream banking systems.
- Managed Jenkins CI builds and deployments, resolving build, configuration and deployment failures.
- Delivered enhancements for Iteration 4 of the SPV project, supporting testing, defect resolution and release activities.

Tech Stack: C#, ASP.NET MVC, .NET Framework, SQL Server, Entity Framework, LINQ, Elsa Workflow, Jenkins, Bitbucket, ALDON, JFrog, Control-M

Azend Technologies – Senior Software Engineer
Dec 2021 – Jun 2022

Colombo, Sri Lanka (Hybrid)

Client: Huntington Learning Center, a US education services provider.

- Provided production support for the ASP.NET MVC application, resolving root causes across C#, Entity Framework and SQL Server.
- Prepared and deployed production releases, validating fixes with support and business teams.

Tech Stack: C#, ASP.NET MVC, SQL Server, Entity Framework, LINQ

QualitApps Asia (Pvt) Ltd – Lead Full Stack Software Engineer
Apr 2019 – Dec 2021

Colombo, Sri Lanka

Led backend and full-stack delivery of web applications for end clients in Spain from the Colombo development centre.

- Led full stack development for the KeySave locker management platform, designing the .NET Core Web API backend, integrating the mobile app and contributing to the Angular back-office application.
- Built full-stack .NET Core and Angular applications for healthcare, HR and hospitality clients, including Colegios Dental Council, Novalab Dental Clinic, Tebex (leave management) and Motelink (hotel management).
- Led code reviews and set coding standards for the team; analysed and resolved backend performance bottlenecks to improve responsiveness and reliability.
- Established CI/CD pipelines and deployment infrastructure, collaborating directly with Spanish client stakeholders on requirements, technical solutions and delivery.

Tech Stack: C#, .NET Core, ASP.NET Core Web API, Angular, TypeScript, Entity Framework Core, SQL Server, MySQL, CI/CD

CICRA Solutions (Pvt) Ltd – Software Engineer
Dec 2017 – Mar 2019

Colombo, Sri Lanka

Enterprise betting platform services for international racing markets across Australia, France, the UK and Ireland.

- Developed backend services and real-time market data feed integrations for TAB systems supporting horse, greyhound and harness racing betting platforms.
- Implemented PMU feed integrations and virtual racing data services, delivering real-time betting market data and odds to the core e-betting platform.
- Gathered client requirements and contributed to system design, code reviews and Agile delivery, while promoting coding standards across the team.

John Keells Holdings PLC – Junior IT Consultant
Jul 2016 – Dec 2017

Colombo, Sri Lanka

Delivered software solutions for Cinnamon Hotels & Resorts (John Keells Group).

- Developed an SMS marketing platform that automatically promoted last-minute room availability to customers, integrated with SAP ERP to support direct online bookings.
- Built enterprise web applications using C#, ASP.NET, SQL Server and Entity Framework, working with business users from requirements through deployment.

CERTIFICATIONS & TRAINING

Formal training in AI-assisted software engineering and building on large language models, applied directly in day-to-day .NET delivery.

Claude Platform 101 – Anthropic (Claude Academy) **Nov 2026**
Building with the Claude API: LLMs, generative AI, AI agents and tool calling. Credential ID: bdce4bca5e532e66c7b234162522ccc6

Claude Code 101 – Anthropic (Claude Academy) **Nov 2026**
AI-assisted development, debugging and code review with Claude Code. Credential ID: 4f108c9da1d15d637242a49fca1cbb08

Claude Code – Master.dev, taught by Lydia Hallie (Anthropic) **Nov 2026**
Agentic coding workflows with Claude Code for production development. Credential ID: bbc17beec3-ONCeVpyzkJ

EDUCATION

Bachelor of Computer Science (BCS) – University of Colombo School of Computing **2011 – 2015**

GCE Advanced Level (Physical Science) – St. Aloysius College, Galle, Sri Lanka **2010**

Mathematics (A), Chemistry (B), Physics (C)

REFERENCES

AVAILABLE UPON REQUEST