

Ravi Kiran Pilli

Email: mail2pilliravikiran@gmail.com | LinkedIn: linkedin.com/in/ravikiranpilli | GitHub: github.com/pilliravikiran
Phone: 201-912-6639 AI/ML Engineer & Full-Stack Developer

PROFESSIONAL SUMMARY:

- Software Engineer qualified for both AI/ML Engineer and Full-Stack Developer roles, with 5+ years in the Pharmacy Ecosystem, shipping production code across PrimeRx, PrimeRx Market, POS, MyPrimeRx, and ePrimeRx.
- Deep domain expertise in Prescription Processing, eRx Automation, EDI Transactions, Insurance Eligibility, Pharmacy Delivery, Drug Price Updates, Tenant Migration, and Patient Engagement.
- Hands-on with 340B Compliance and Compounding Rx workflows: split-billing logic, drug-price tier handling, and audit trails for covered entities.
- Built Patient Engagement on a PWA Architecture: appless install, push notifications, offline-first refills, eliminating native app-store distribution.
- Strong full-stack foundations in Angular, .NET (C#, ASP.NET Core), SQL Server, Elasticsearch, MongoDB, Apache Kafka, Auth0/WebAuthn, Azure, and Azure DevOps.
- AI-augmented engineering using Claude Code, ChatGPT, Cursor, GitHub Copilot, and Google Antigravity to accelerate feature delivery, refactors, and code review.
- Direct integration of OpenAI, Anthropic, and Gemini APIs; explored LangChain, RAG, embeddings, and Pinecone for retrieval-augmented features.
- Led codebase-wide Timezone Migration with NodaTime/IANA, SQL Server AT TIME ZONE, and Angular Localization across 300+ screens.
- Improved prescription lookup performance by ~30% via Elasticsearch multi-search query optimization.
- Fixed SQL Server connection leaks by refactoring retry pipeline scoping and async patterns.
- Designed event-driven architecture with Apache Kafka for real-time data streaming and pharmacy transaction messaging.
- CI/CD experience with Azure DevOps and Jenkins; deployed to Azure App Services and IIS.
- Built and shipped an AI-Powered Quiz Platform in Angular from scratch with dynamic question generation and real-time scoring for 300+ live participants.
- Built and deployed PortfolioBot, a production RAG (Retrieval-Augmented Generation) assistant embedded live on my portfolio site: FastAPI on OpenAI GPT-4o-mini with text-embedding-3-small, ChromaDB persistent vector store, and a custom Router that classifies questions as Personal (RAG-grounded with cited sources) vs General (direct LLM).
- AI / GenAI focus areas: Generative AI, LLM Application Development, Retrieval-Augmented Generation (RAG), Vector Databases (ChromaDB, Pinecone), Embeddings and Semantic Search, Prompt Engineering, OpenAI / Anthropic / Gemini API Integration, and FastAPI / Python AI Backends.
- Strong background in unit, integration, and end-to-end testing with NUnit, xUnit, Jasmine, and Karma.
- Collaborated with QA, product, and business stakeholders in Agile Scrum to align engineering with product goals.
- Mentored junior developers, conducted code reviews, and championed best practices across teams.
- Maintained compliance in healthcare-regulated systems through secure API design, role-based access control, and audit logging.
- Comfortable across the stack: frontend (Angular, TypeScript, RxJS, PWA), backend (.NET, C#, REST), data (SQL Server, MongoDB, Elasticsearch), and cloud (Azure).
MySQL, PostgreSQL).

TECHNICAL SKILLS:

Frameworks & Libraries	ASP.NET MVC, ASP.NET Core, Angular, ReactJS, Entity-framework, LINQ, ADO.NET
Architecture	Microservices, RESTful APIs
Cloud Technologies	Azure
Testing Frameworks	NUnit, XUnit, Jasmine, Karma
Security Protocols	OAuth2, JWT, Auth0
Development Methodologies	Agile, Scrum, Test-Driven Development (TDD)
Programming Languages	C#, JavaScript, TypeScript, SQL
Integration & Communication	Web Services (SOAP, REST), WCF, JSON, XML
Operating System	Windows XP/Vista/7 and Windows Server 2008, MacOS, Ubuntu

Development Tools	Visual Studio, Azure DevOps, Docker.
Databases	SQL Server, PostgreSQL, MongoDB, NoSQL, Apache Kafka
Frontend Technologies	HTML5, CSS3, JavaScript, Responsive Design
GenAI & AI Tools	OpenAI API, Anthropic API, Gemini, LangChain, RAG, Vector Databases (ChromaDB, Pinecone), Embeddings, Semantic Search, Prompt Engineering, FastAPI

WORK EXPERIENCE:

Organization: RedSail Technologies (formerly PrimeRx by Micro Merchant Systems) **March 2026 - Present**

Project: PrimeRx Cloud, Patient Engagement, PrimeRx Market, POS, MyPrimeRx

Role: AI-Powered Full Stack Engineer **Responsibilities:**

- Designing, developing, and maintaining pharmacy management software across the PrimeRx ecosystem using C#, ASP.NET Core, SQL Server, and Angular.
- Building Patient Engagement on a PWA Architecture: appless install, push notifications, and offline-first refills, eliminating native app-store distribution.
- Implementing 340B Compliance and Compounding Rx workflows: split-billing logic, drug-price tier handling, and audit trails for covered entities.
- Leading codebase-wide Timezone Migration: UTC storage with NodaTime/IANA, SQL Server AT TIME ZONE, and Angular Localization.
- Datetime Localization across 300+ screens via interceptor-based and service-based approaches for accurate cross-timezone display.
- Fixed SQL Server connection leaks by refactoring the retry pipeline scoping and async patterns, improving system reliability.
- Optimized Auth0: WebAuthn/Passkey biometric flows, Phone MFA, Email OTP, and SSO certificates for secure patient authentication.
- EDI Transaction Processing for pharmacy billing, insurance claims, and real-time eligibility verification.
- Authored Tenant Migration Scripts for drug and patient data; built Drug Price Update workflows.
- eRx Automation, Eyecon integration, and Delivery and Shipping Feature enhancements.
- AI-augmented engineering using Claude Code, ChatGPT, Cursor, GitHub Copilot, and Google Antigravity to accelerate feature delivery, refactors, and code review.
- Integrated OpenAI, Anthropic, and Gemini APIs into product features; explored LangChain, RAG, embeddings, and Pinecone for retrieval-augmented capabilities.

Environment: Angular, PWA, ASP.NET Core, C#, TypeScript, SQL Server, Elasticsearch, MongoDB, Apache Kafka, Azure, Azure DevOps, Auth0, WebAuthn, JWT, RESTful APIs, EDI, NodaTime, NUnit, xUnit, Agile Scrum, Claude Code, Cursor, GitHub Copilot, OpenAI, Anthropic, LangChain.

Organization: PrimeRx

May 2025 – Dec 2025

Project: PrimeRx Cloud, Patient Engagement

Role: Software Engineer Intern

Responsibilities:

- Optimized Elasticsearch multi-search queries for prescription lookup and drug search modules, improving search performance and reducing response times by ~30%.
- Designed and enhanced RESTful APIs using ASP.NET Core and C# to support real-time prescription processing and transaction flows.
- Implemented UTC-to-local datetime conversion handling across Angular grids to ensure accurate localization across different time zones.
- Built and refined secure transaction flows integrating payment APIs and digital signature capture workflows for pharmacy billing operations.
- Developed features for the Patient Engagement Platform: secure biometric login (Face ID), Rx refill requests, Rx history and refill status, insurance management, due-date tracking, and direct chat with pharmacy staff.
- Contributed to PrimeRx Cloud modernization including centralized prescription processing, cloud-hosted data storage, advanced distributed search, and real-time transaction handling with cross-location synchronization.

- Debugged and resolved production issues related to API latency, data mapping inconsistencies, and UI state synchronization, improving overall system reliability.
- Collaborated closely with cross-functional teams in Agile sprints, participating in design discussions, code reviews, and deployment cycles.
- Assisted in deployment processes across development, QA, and production environments, ensuring smooth release management.
- Contributed to backend scalability improvements and system performance optimization for high-traffic pharmacy transaction systems.

Environment: Angular, ASP.NET Core, C#, TypeScript, Elasticsearch, SQL Server, Azure, RESTful APIs, Auth0, JWT, Agile Scrum, Azure DevOps.

Organization: Sails Software Solutions

May 2021 – September 2023

Project: ePrimeRx

Role: .Net Full Stack Developer Responsibilities:

- Developed key pharmacy system functionalities using C#, .NET, SSMS, and Elasticsearch, optimizing real-time data processing and communication flows.
- Built dynamic, responsive user interfaces with Angular, HTML, CSS, and Bootstrap, enhancing user experience and interface consistency.
- Integrated RESTful APIs between Angular frontends and .NET Core backends, ensuring seamless data exchange.
- Automated CI/CD pipelines using Azure DevOps to enhance deployment efficiency and system reliability.
- Authored detailed API documentation with Swagger for easy integration and developer support.
- Created and optimized SQL queries, stored procedures, and database operations using ADO.NET and SQL Server.
- Deployed and managed scalable web applications on Microsoft Azure and IIS, utilizing Jenkins for automated build pipelines and seamless integration.
- Designed and implemented a Delivery and Shipping Feature in .NET, improving system functionality and supporting business needs; created API-driven solutions for third-party service integration.
- Collaborated closely with clients to gather comprehensive requirements, delivering customized solutions with high-performance database management and efficient data retrieval.
- Automated eRx processing to eliminate manual checking and filling of prescriptions, enhancing workflow efficiency.
- Implemented tenant migration scripts to facilitate smooth data transitions and system scalability.
- Integrated various system components with Microsoft Azure, enabling robust cloud support and enhanced scalability.
- Managed production builds, provided ongoing production support, and ensured system stability by addressing issues and performing bug fixes; conducted code refactorings to improve code quality, maintainability, and performance.
- Utilized Jira for issue tracking, project management, and team collaboration, ensuring tasks were completed on schedule.
- Employed Jenkins for continuous integration and delivery, streamlining the deployment process and reducing downtime.
- Performed unit and integration testing using NUnit and xUnit to ensure robust and error-free applications.
- Migrated legacy systems to Angular and .NET Core, improving scalability and reducing technical debt.
- Developed and tested reusable components to reduce development time and enhance maintainability.
- Worked closely with QA teams, backend developers, business analysts, and product owners to resolve issues.
- Participated in Agile sprints to ensure timely delivery of features aligned with project goals.
- Documented reusable solutions, components, and processes to promote collaboration and knowledge sharing across teams.
- Built secure and scalable APIs with OAuth2 authentication and role-based access control in .NET Core.
- Designed and implemented event-driven architecture with Apache Kafka for real-time data streaming.
- Conducted detailed code reviews to ensure high-quality, maintainable, and best-practice-compliant codebase.
- Integrated barcode scanning and label printing workflows for prescription dispensing operations, reducing manual entry errors and accelerating fill times.
- Built audit logging and user activity tracking modules to support regulatory compliance and traceability across pharmacy workflows.

- Implemented role-based dashboards with customized views for pharmacists, technicians, and managers, improving daily operational efficiency.
- **Environment:** Angular, .NET Core, TypeScript, Single Page Applications (SPAs), HTML5, CSS3, Bootstrap, Responsive Design, Cross-Browser Compatibility, UI/UX Collaboration, RESTful APIs, Azure DevOps, CI/CD Pipelines, Swagger, SQL, NoSQL, ADO.NET, SQL Server, NUnit, XUnit, Legacy System Migration, Reusable Components, Agile Sprints, NgRx, State Management, OAuth2 Authentication, Role-Based Access Control, Event-Driven Architecture, Apache Kafka, Real-Time Data Streaming, API Documentation, Database Optimization, Integration Testing, Front-End Performance Enhancement, Knowledge Sharing, Technical Debt Reduction.

Organization: Sails Software Solutions

May 2019 – May 2021 Project: ePrimeRx

Role: Software Engineer Intern

Responsibilities:

Built core pharmacy functionality in C#/ .NET and Angular alongside senior developers.

Integrated RESTful APIs for client-server communication; supported Azure/IIS deployments with Jenkins CI.

Participated in Agile Scrum ceremonies, requirements gathering, and QA validation.

Environment: Angular, .NET, C#, HTML, CSS, Bootstrap, RESTful APIs, Azure, IIS, Jenkins, Agile Scrum.

Personal Projects:

- **PortfolioBot** — AI Assistant (Live on portfolio site, 2026): Production RAG assistant — FastAPI + OpenAI GPT-4o-mini text-embedding-3-small + ChromaDB. Custom Router classifies questions as Personal (RAG-grounded, returns cited sources) vs General (direct LLM). Authored idempotent ingestion pipeline (.md/.pdf/.docx → 800-char chunks → embeddings → ChromaDB), Top-K (5) cosine retrieval, three-role Prompt Engineering, CORS-locked endpoints, deployed on Render.
- **Remindly** — AI Reminder & To-Do App (Flutter, 2026): Cross-platform app with full-screen alarm-style reminders. Integrated Google Gemini for natural-language reminder creation, photo-to-reminder parsing, AI-generated to-do lists, an in-app assistant chat, and weekly insights. Every AI feature degrades gracefully — fully functional offline. Firebase Auth+ Firestore sync.
- **ScrumAgent** — Agentic AI for Scrum Masters (Python, 2026): Built on Anthropic Claude with a tool-use loop (create_ticket / draft_email / ask_user) that turns meeting transcripts into Jira tickets and a follow-up email. Independent verification pass audits every ticket against the source transcript to prevent hallucination; inline clarification loop for ambiguous owners/deadlines; sprint health reports from live Jira data. Production-hardened with retries/backoff; 45 tests, no network required.
- **AI-Powered Quiz Platform** (2025): Angular + OpenAI / Anthropic APIs. Dynamic question generation, real-time scoring engine, and animated leaderboards. Ran a live session with 300+ concurrent participants.

Certifications:

- Microsoft Azure Fundamentals.
- Google AI Essentials.
- Google UX Design professional certification.
- Unit Testing .NET 9 with xUnit .NET v3.

Education Details:

- Masters in Computer Science from Montclair State University (MSU) | 3.9/4 | (2024 Jan – 2025 Dec)
- Bachelors in Computer Science Engineering from IIIT Nuzvid, AP, India | 8.5/10 | (2017-2021)

Honors and Awards:

- **Client Delight Award** – Sails Software Solutions: Recognized as the Best Performer for the MMS project, delivering innovative real-time data solutions, optimizing application architecture, and providing exceptional production support for the ePrimeRx™ software. Google AI Essentials.
- **Employee of the Month** – Sails Software Solutions: Awarded for outstanding contributions as a UI Developer, with a focus on successful code refactoring and optimization.