




Niroshan Ranapathi

Lead Software Engineer - AI Engineer

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developing enterprise cloud platforms, microservices, and UI components. An enthusiastic individual who is not technologically locked-in with a proven history of working in agile teams on fast-paced projects. Always enjoy exploring novel technologies and adapting them to solve problems.		
Experience	Magic Inc Independant Senior AI Consultant  https://getmagic.com <ul style="list-style-type: none">Agentic Workflow Automation (GenAI, CrewAI, n8n, Flowise)<ul style="list-style-type: none">Designed and deployed end-to-end agentic automation systems using GenAI tools including CrewAI, n8n, and Flowise, enabling intelligent task delegation, context retention, and tool integration across workflows.Developed reusable agent templates for lead generation, web research, outreach, and multi-tool orchestration with persistent memory.Conversational AI & Virtual Assistant Development<ul style="list-style-type: none">Built full-stack chat applications powered by LLMs for use cases including customer support, task execution, and dynamic prompt routing.Implemented real-time streaming, speech-to-text, and tool-triggering via structured prompt systems, ensuring scalability and fast user interactions.Generative AI Ecosystem Knowledge – Deep understanding of AI orchestration frameworks (LangChain, LlamaIndex, Haystack) and cloud-based AI offerings (AWS Bedrock, Vertex AI, Azure Machine Learning).LLM Proficiency – 2+ years of experience with Large Language Models (LLMs), covering prompt engineering, fine-tuning, and integration into real-world applications. Skilled in working with multiple LLM providers (OpenAI GPT/O families, Anthropic Claude, Google Gemini, xAI Grok) and open-source models (LLaMA, DeepSeek, Mistral).Data Expertise – Strong foundation in data engineering, analytics, and data science, with hands-on experience in big data technologies (Hadoop, Spark, Hive) and database systems (SQL, NoSQL).Graph Database Expertise – In-depth knowledge of graph database concepts, data modeling, and query languages (e.g., Cypher), with practical experience using Neo4j, Amazon Neptune, TigerGraph, and triple stores (Ontotext, Stardog).	May 2025 - Present Present
	Temus Pte Ltd Lead Software Engineer - AI/ Cloud <ul style="list-style-type: none">Government Commercial Cloud integration integrated application development for Singapore Building Construction Authority-related applications (CorenetX and Project Portal).Manage cloud infrastructure and perform VAPT in accordance with government security guidelines (IM8, CISCAT, OWSAP, ITGC)Building LLM-enabled Chatbot Applications for Financial Analysis and Cybersecurity Compliance Management (GPT 4o, claude, Lamma)Building LLM-enabled multi-agent system development and NLP voice-enabled chatbot developmentPOC and research related to RAG integration (VectorDB, Pre-Retrieval, Post-Retrieval, MLOps practices, MLFlow)Deploy machine learning models and evaluate model performance.Developed applications for Microsoft Windows OS, including client Software Development Kits (SDKs), MS DirectML, WinML, and MS Graph.Establish the required tests for continuous integration and deployment, and implement and oversee the automation pipelineML-enabled application deployment with Terraform, Docker, and serverless	Sep 2022 - May 2022 Singapore
	Defence Science Agency & Technology Singapore, Lead Application Consultant Senior Application Consultant <ul style="list-style-type: none">Building a highly available application for the Singapore defense ministry (OneNs, SmartICT)Conducted security assessments and developed cyberproof applicationsTroubleshooting and fixing bugs in existing microservicesSetting up a data pipeline and automating infrastructure with cloud formation and terraform	2021 Feb - 2022 Sep Singapore
	Secure 3DP Pte Ltd Lead Software Developer <ul style="list-style-type: none">Led core development teamBuilding new feature development for existing multi-tenant web applicationDesigned and implemented CICD Pipeline for the Blockchain ApplicationTroubleshooting and fixing bugs in existing microservicesDesign and develop micro service-based API using REST and GraphQLAWS Infrastructure Architecture, Software Architecture, Performance OptimizationBlockchain Development and IntegrationUI design and Development	July 2020 – Feb 2021 Singapore
	Gumi Asia Inc Software Developer <ul style="list-style-type: none">Building new feature development for existing mobile games.Worked with QA Team to create automation tests / AI Automated testsDesigned and implemented CICD Pipeline for the Mobile GamesTroubleshooting and fixing bugs in existing microservicesDesign and develop micro service-based API using REST and GraphQLBug fixing and Performance enhancementDeveloped analytic tools to manage the metadata and extract lineage and other useful information from GoogleAdwords, Appflyer and facebook Graph API	Oct 2019 - July 2020 Singapore
	Sysco Labs Pvt Ltd Senior Software Engineer <ul style="list-style-type: none">Developed highly Scalable microservices which can cater more than 1 million requestsDesigned and Developed a responsive and stylish user interface framework and web components using React.js and HTML5Implemented Unit testing, Integration Testing and CICD Pipeline AutomationInvolved for the Code Review, Peer Review and Architecture reviews;Involved for the Architecture discussion (AWS Solution Architect and Software Architect)Led the software development team and provided mentorship for the junior software engineers.	Oct 2019 – Oct 2017 Sri Lanka
	99X Technology Pvt Ltd Software Engineer <ul style="list-style-type: none">Developed web and Mobile APIs, Mobile apps and Web AppsSupported and educated clients with their products and featuresProvided post-production support for the clientsImplemented Unit testing, Integration Testing and CICD Pipeline automation;Contributed for the existing Open Source Projects and published new open source libraries;Involved for the Code Review, Peer Review and Architecture Reviews	March 2017 – May 2016 Sri Lanka
	University of Moratuwa, Sri Lanka Computer Science & Engineering	Mar 2013 – Dec 2017 BSc in Engineering
	University of Wolverhampton Business Administration	Mar 2020 – Mar 2022 Master of Business Administration
	Research Topic: Token Economy for Economic growth	
Projects	Project Portal / Corenet X- Building Construction Authority, Singapore Leading BCA Integration Squad to develop a project management portal to manage construction projects and seek approval from regulatory agencies from the planning to completion stage. - Data Integration with SG Government Agencies (IRAAS, NPark) <ul style="list-style-type: none">Setting up ELK Stack and SPLUNK solution on GCC Cloud AWS Lambda, Python, SQL, django, llm, azure, gcc, Amazon Secrets Manager, ECR, ECS, ElasticCache, CloudWatch, Pytest, Sentry, Django, databrick, synapse	June 2023 - Present
	AI Financial Advisers - Temasek (POC) <ul style="list-style-type: none">Leading and Contributing to the AI Team for a Financial Advisor AI MVPGPT 4 Model finetuning - RAG Integration - Exact Financial report and chart using AI Tools Technologies: GCC, AWS, Bedrock, Azure, ShipHat, Python, Terraform, llama-3, SQL	Dec 2023 - June 2023
	HeathX.sg (Integrated Health Information Systems) Leading and Contributing to the IHIS Innovation Capability Enhancement team to develop developer portal for consolidating IHIS HealthCare APIS and other services—New feature development <ul style="list-style-type: none">AWS Solution Architect for application modernizationProject managementMigrate on promises Services to Healthcare cloud AWS, HCC, LLM, GPT	June 2023 - April 2022
	Cyber Attestation Portal/ Financial GPT Contributed to the IHIS Innovation Capability Enhancement team to develop chat bot applications for validating cyber security compliances New feature development, data analysis, UI/UX Design <ul style="list-style-type: none">LLM fine tuning - API developmentUI development Technologies: GPT-3, GPT-4, React, AWS Textract, Langchain, Python, nodejs GPT-3, GPT-4, React, AWS Textract, Langchain, Python, nodejs	June 2023 - Mar 2023
	BII Flu-Cluster - A Star Contributed to the A Star Bioinformatic research team to develop a data visualization web portal. New feature development, data analysis, UI/UX Design: <ul style="list-style-type: none">Security scan, Source code scan and Vulnerability testingBDD test automation design, CICD automation d3js, python, react, figma, chartjs, visualisation	
	OneNS/Smart ICT (NCS) Led and contributed to the SMART ICT/OneNs team to develop new mobile and web applications. <ul style="list-style-type: none">New feature development, Bug fixing and performance enhancement: security scan, Source code scan and Vulnerability testingBDD test automation design, CICD automation Java Springboot, Micro Services, React-Native, AWS, React, Typescript, CloudWatch, Cucumber, Jest, Mocha, Micro Frontend, Owasp	Sep 2022 - Feb 2021
	Secur3DP Blockchain Based 3D Printing Application Led and Contributed Secure3DP (Medical 3D printing) MVP product <ul style="list-style-type: none">Manage Core development teamCode Review, Peer Review, Infrastructure design, ResearchBlockchain development, Smart contract developmentConducting Agile Sprint and documentation NextJs, ReactJs, AWS Lambda, Severless, Solidity, ECS, Docker, Web3js, Truffle	Feb 2021 - Feb 2020
	Gumi Live, Gumi Pay, FFBE Game, Slots game and Munshi Contributed to the engineering team (GTech), which is responsible for creating mobile game-based common microservices and managing cloud-based infrastructure. <ul style="list-style-type: none">Developed new features for the GumiLive and GumiPay (Apple SignIn, facebook SignIn)Automated and added new enhancement for Mobile game CICD pipelines Python, Django, AWS, Lambda, Apple, Ansible, Microservices, Jenkins, NewRelic	Nov 2020 – Sep 2019
	LTV Data Analytics Platform Worked with the data analytics team to develop an analytical platform for analyzing mobile game data. GCP, BigQuery, Python, Panda, SQL, numpy	Nov 2020 – Sep 2019
	Skills	Programming Languages Python, JavaScript, TypeScript, C# BackEnd Framework Nodejs, Nestjs, Django, Flask Frontend Technologies React, Nextjs, Material UI, Redux, CSS, TailwindCSS Databases NOSQL - MongoDB, and DynamoDB SQL - MySQL , PostgresSQL ORM – TypeOrm, Mongoose ML Technologies LLM, OpenAI, llama 3, claude 3, ML Algorithms, Generative AI, RAG, PyTorch, Azure Synapse, ML Studio, GPU, TensorFlow, TensorRT