Ashen Gunaratne

linkedin.com/in/ashenm
launchpad.net/~ashenm
github.com/ashenm
(+94) 77 429 9712
mail@ashenm.dev

experience

Secure Agility
Sydney, Australia
Lead DevOps Engineer
August 2023 - Present

Lead cross-SaaS integration architect; Design, author, and oversea custom integrations and workflows interconnecting multiple SaaS services.

Alembic   Autotask   Azure DevOps Services   Azure   Ekahuau   Float   GitHub   ITGlue   LogicMonitor   PowerBI
Python   Terraform

Singlife
Singapore, Singapore
Technical Lead
April 2022 - July 2023

Mobile backend tech lead; Design, author, and review RESTful API specifications and moderate related infrastructure cohering to compliance and security statues.

Anti-Corruption Layer   AWS   AWS CDK   Jest   Node.js   Quantum Databases   RESTful APIs   Slack Bots   TeamCity
TypeScript

Railsbank
London, United Kingdom
Associate Technical Lead
December 2021 - March 2022

BaaS integrations tech lead; Plan, design, and oversea regulated provider infrastructure integrations conforming to compliance and security statutes.

AWS   CucumberJS   Elastic Stack (ELK)   GitLab CI/CD   GraphQL   Jest   Kubernetes   mTLS   Node.js   OpenPGP
RESTful APIs   Slack Bots   Terraform   TypeScript

Railsbank
London, United Kingdom
Engineer
December 2020 - December 2021

BaaS integrations engineer; Design, author, and review regulated provider infrastructure integrations conforming to compliance and security statutes.

AWS   CucumberJS   Elastic Stack (ELK)   GitLab CI/CD   GraphQL   Jest   Kubernetes   mTLS   Node.js   OpenPGP
RESTful APIs   Slack Bots   Terraform   TypeScript

Al Iman Schools
Colombo, Sri Lanka
Educator
October 2020 - December 2020

Educator for computer science; Responsible for designing, implementing, and delivering custom tailored curriculums for key stages three, four, and five with emphasis on art of programming and integrating computer science in the domain of other subjects.

AsciiDoc   CSS   HTML   JavaScript   Python   PyUnit

British College of Applied Studies
Colombo, Sri Lanka
Lecturer
July 2018 - July 2019

Instructor for *Pearson BTEC HND* in Computing; Responsible for level 5 specialist units: *Computer Systems Architecture*, *Data Structures and Algorithms*, *Discrete Mathematics*, *Network Management*, and *Network Security*.

C   Firewalls   IDS/IPS Systems   JavaScript   Python

Exetel PTY Limited   Sydney, Australia
Network Engineer   October 2016 - February 2017

Govern, implement, and troubleshoot real-time traffic steering policies to ensure critical application delivery, value-added services, and user quality of experience driving profitability of key deliverables in the digital data & device space in terms of revenue, users, traffic across 30 Gb/s data link.

Firewalls   IPv4   RADIUS Servers   SNMP   TCP/UPD   VoIP

IKON Systems (Private) Limited   Colombo, Sri Lanka
Chief Information Officer   January 2016 - October 2016

Direct and manage computing and information technology strategic plans, policies, programs, schedules, and responsible for advertising network's scalability, security, and capacity-planning.

AWS   Systemd   HAProxy

open source contributions

Azure Resource Manager
Terraform Provider

Contributions include feature implementations and bug fixes on existing resource types and data sources.

Databricks
Terraform Provider

Contributions include feature implementations and bug fixes on existing resource types and data sources.

research interests   Cybersecurity, digital forensics, botnets, computer science education, distance learning, collaborative learning, computer-assisted instruction

education

Harvard College   Massachusetts, United States
Bachelor of Liberal Arts (A.L.B.)   June 2017 - September 2021

Computer Science; GPA 3.9 (as of May 2018)
Related studies in linear algebra, statistics and probability, and finance.

Stanford University   California, United States
MOOC   October 2017 - November 2017

Studies in enterprise-level web application deployment with focus on security, reliability, scalability, and cross-browser support.

Harvard University   Massachusetts, United States
MOOC   January 2015 - December 2015

Studies in computer science for real-world domains of biology, cryptography, finance, forensics, and gaming.

Université Catholique de Louvain   Charleroi, Belgium
MOOC   January 2015 - November 2015

Studies in major programming concepts, techniques, and paradigms in a unified framework.

The University of British Columbia   Vancouver, Canada
MOOC   January 2015 - October 2015

Studies in computation as a tool for systematic problem solving in non-computer-science disciplines.

Lakeland Inter-American School   Colombo, Sri Lanka
Pearson Edexcel AS Level   June 2014 - July 2015

Lakeland Inter-American School   Colombo, Sri Lanka
Pearson Edexcel Ordinary Level   March 2011 - June 2014

projects

Singlife's BaaS provider reverse-engeering

- Associate technical lead for Railsbank replacement with in-house BaaS service
- Coarchitectured in-house replacement service to extactly replicate Railsbank functionalities
- Designed and authored the state machines for transaction execution - interledger, manual credit, and manual debit transactions
- Designed and authored DBS outbound and inbound integration connectors to facilitate Fast and PayNow payments and ICN notifications

Habitto Money GraphQL and REST backend

- Lead consultant for setting up initial backend monorepo and related pipelines
- Setup initial Nx monorepo, BitBucket OpenID runner authentication, and inital Terraform setup
- Later, consultant and lead developer for authoring fully automated self provisioning review environments using BitBucket CI/CD with multiple deployables
- Lead developer for authoring a seamless custom in-house replacement solution for Fivetran

Dealt Australia

- Lead architect for migrating existing customer-hosted Hyperledger Fabric to ImmuDB
- Automated all application deployments and configuration management using AWS CodeDeploy and BitBucket CI/CD
- Migrated all existing infrastructure to use IaC for management and provisioning and added enforcement checks to prevent manual infastructure manipulations
- Revamped virtual cloud networking to incorporate public, private, and NAT subnets and redesigned the microservice entrypoints and inter-service communication
- Standardized logging, monitoring, and alerting

CaterCare Australia

- Lead consultant and developer for standardizing GitHub developer workflows
- Wrote a custom extensible GitHub Action to facilitate auto-labelling and auto-approving for a specific set of pull-requests obeying a predefined ruleset that require no reviews
- Set up branch/tag protection rules, code owners, secret scanning, and repo properties to standardize merging and pull-request approvals

honors and awards

HackerRank

Gold Honours - Problem Solving

Gold honours, five-star proficiency rating, in the domains of algorithms and data structures.

HackerRank

Gold Honours - Python

Gold honours, five-star proficiency rating, in the domain of Python subsuming all language-supported paradigms.

HackerRank

Gold Honours - SQL

Gold honours, five-star proficiency rating, in the domains of SQL subsuming all language-supported paradigms.

licenses & certifications

Databricks
Platform Administrator

Databricks
Azure Databricks Platform Architect

Databricks
AWS Databricks Platform Architect

OpenJS Foundation
Node.js Application Developer

HashiCorp
IaC Automation

HackerRank
Python

academic service   **freeCodeCamp**
Curriculum Contributor   February 2017 - Present
Authore guides and specimen solutions for freeCodeCamp certification program challenges on algorithm design.

edX
Content Support Associate   December 2016 - Present
Validate and alter qualitative attributes of uploaded course materials to meet edX guidelines.

community service   **United Nations**
Volunteer Task Force   January 2015 - Present