MICHAEL HARRISON

Software Engineer /Geek

SPECIALIZATIONS

Strong Professional Experience:

• Leading **SCRUM** and **Agile** teams.

• Requirement gathering & product architecture.

• User-Centered Design.

• **MERN** stack development. (MongoDB, Express, React, NodeJS)

• Back-End **Golang** development

• **Kubernetes** & **Docker**.

• **GCP**, **AWS** & **Azure** cloud infrastructure

• **MongoDB** (Cloud and on-premises)

• Workflow automation.

Personal Experience or Interest

• Dart & Flutter mobile/web development.

• VueJS web development.

• AI and Large Language Models.

EDUCATION

Monash University

BACHELOR OF COMPUTER SCIENCE, 2014

• Studied Computer Science with a focus on Data Science, Statistics and Applications Development.

• Java, C++, C#, Python, R, SQL.

EXPERIENCE

Senior Software Engineer
OneSpan
MAR 2023 – AUG 2024

Southbank Software was acquired by OneSpan to leverage the ProvenDB technology and expertise to add Blockchain proofing to their digital agreements product. Key responsibilities included:

• Architecting a new platform for **blockchain** proof creation across **Java**, **Javascript** and **Go** microservices.

• Design and Implementation of a **NodeJS REST API** tointegrate existing OneSpan products

• Re-architecture and development on a **Go** back end to increase **scalability**.

Lead Developer
Southbank Software
NOV 2016 –MAR 2023

Cofounded and led a Melbourne-based startup across two products, dbKoda and ProvenDB. Key responsibilities included:

• Leading a team of 10 senior and junior designers

• Design and implementation of **cloud architecture.**

• **Blockchain/DLT design** and development.

• **Docker and Kubernetes** design and deployment.

• **Full-Stack Electron (MERN)** development.

• Implementing MongoDB best practices.

• Design and implementation of CI/CD Pipelines

• Golang back end microservice implementation.

Team Leader
Telstra Automation
JAN 2016 –NOV 2016

• Design and creation of **Workflow Automation.**

• Requirements gathering and internal stakeholder liaison.

• **Golang** and **Javascript** development.

KEY PROJECTS

Compliance Vault
DIGITAL VAULT FOR COMPLIANCE DOCUMENTS

- Blockchain-enabled document store.
- Ensures immutability and proof of key user documents.
- Web interface and REST API access.
- Built using NodeJS, React and MongoDB.
- Leverages ProvenDB for Blockchain proofs.
- Kubernetes Deployment running on Microsoft Azure.

ProvenDB
BLOCKCHAIN ENABLED DATABASE

- Blockchain-enabled Database as a Service (DBaaS).
- Ensures tamper-detection, versioning and verifiable ownership of any data.
- Compatible with the MongoDB API.
- Built using Java, Golang and MongoDB.
- Kubernetes Deployment running on Google Cloud Platform

dbKoda
OPEN-SOURCE MONGODB IDE

- Open-Source, free to use desktop IDE for MongoDB.
- Available on Mac, Linux and Windows.
- Built using Electron, NodeJS and React.

PUBLICATIONS

MongoDB Performance Tuning
APRESS, 2021
GUY HARRISON & MICHAEL HARRISON

Fast and complete guide to optomize the performance of MongoDB databases and the applications that depend on them.

MongoDB Fundamentals
PACKT, 2020
MICHAEL HARRISON ET AL

A hands on guide to MongoDB and Atlas in the real world, with practical tutorials and examples across a variety of topics

PATENTS

Blockchain-enhanced proof of identity
US11689374B1, Issued Jun 27, 2023

A method and set of technologies for creating a blockchain-backed proof of identity, leveraging multiple existing proof of identity methods along with advanced cryptography to create a tamper-proof record which can then be immutable stored on a public blockchain for verification.

CONTACT

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