

# Rukshan Ranatunge

### **Rukshan Ranatunge**

Allschwil Switzerland

rukshan@ruky.me LinkedIn | GitHub

#### **Skills**

- Health information system development and implementation
- Biomedical informatics
- Database Management
- FHIR standards and implementation
- Academia and publications
- HL7 standards
- DHIS2
- R
- Go
- Python
- JAVA
- JavaScript
- Web technologies
- Project management
- Medicine and surgery

I'm Dr Rukshan Ranatunge, currently working as a health informatics specialist at Swiss Tropical and Public Health Institute (SwissTPH) for the Swiss Center for International Health (SCIH).

I have a Master's degree in Biomedical Informatics from the Postgraduate Institute of Medicine University of Colombo, with a bachelor's degree in Medicine from the University of Kelaniya Sri Lanka.

I have over 5 years of experience in designing, developing and implementing health information systems, and digital health standards at national level, and experienced in overcoming challenges in different countries and technical environments.

I am a highly technical person with good analytical skills. I'm interested in computer science, health information systems, interoperability in healthcare and finding novel ways to solve health information problems.

I am interested in academia and conducting research in the field of digital health and improving the digital health landscape.

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### **Experience**

- Medical doctor
- Designing and implementation of clinical decision support systems (CDSS)
- FHIR profiling and implementation
- DHIS2 customization and implementation
- Development of WHO critical care in crisis SMART guidelines
- Full stack web developer with more than 10 years of experience
- Project management at SwissTPH / Ministry of Health Sri Lanka
- Designing, development and implementation of the Open data portal for the Ministry of Health Sri Lanka

# Health Informatics Specialist at Swiss Tropical and Public Health Institute

AUGUST 2023 - PRESENT, SwissTPH, Switzerland

# **Technical Working Group on National Electronic Health Record /** Committee member.

March 2023 - PRESENT, Ministry of Health, Sri Lanka

I'm working as a technical working group committee member in developing the national electronic health record (NEHR) which aims to develop a longitudinal health record of all the citizens of the country.

### **Sri Lankan Open Data Portal For Health / Principal researcher**

AUGUST 2022 - PRESENT, Ministry of Health, Sri Lanka

Currently ongoing research project- Sri Lanka is developing its own open data portal to share the large amounts of datasets generated each year. I'm currently leading the designing, developmenting and implementation of the national health data portal.

# FHIR Implementation Architecture and Technical Committee / Committee member

DECEMBER 2021 - PRESENT, Ministry of Health, Sri Lanka

I'm working as a committee member of the FHIR implementation architecture and technical advisory committee. Where I work to implement the FHIR standard in Sri Lanka.

#### National Covid Health Information System / Project Manager

AUGUST 2021 - PRESENT, Ministry of Health, Sri Lanka

I'm currently developing and managing the National Covid Health Information System, where I coordinate one of the largest open source projects in Sri Lanka with nearly 20 developers.

#### **Postgraduate Institute of Medicine / MSc Trainee**

OCTOBER 2020 - PRESENT, University of Colombo, Colombo

I started my master's program in Bioinformatics at the Postgraduate Institute of Medicine, University of Colombo. I'm currently in my second year in my masters program.

#### Base Hospital Kanthale / Medical Officer in Paediatrics

MARCH 2019 - OCTOBER 2020, Trincomalee

I worked as a medical officer in pediatrics and neonatology at the pediatric and premature baby unit at base hospital Kanthale, Trincomalee.

#### District General Hospital Kegalle/ Post Intern Medical Officer

NOVEMBER 2017 - MARCH 2019, Kegalle

I worked as a post-intern medical officer in surgery at district general

hospital Kegalle.

### District General Hospital Kegalle/ Intern Medical Officer

NOVEMBER 2016 - NOVEMBER 2017, Kegalle

I completed my medical internship in surgery and pediatrics at district general hospital Kegalle.

#### University of Kelaniya/ Research assistant

June 2016 - NOVEMBER 2016, Department of medicine

I worked as a research assistant for the department of medicine at University of Kelaniya after completing my MBBS degree for a period of 6 months.

#### **Education**

### **University of Colombo/** MSc Biomedical Informatics

August 2020 - March 2023

Completed the MSc in Biomedical informatics with successful defense of the thesis March 2023.

# **University of Kelaniya** / Bachelor of Medicine, Bachelor of Surgery

August 2010 - June 2016, Sri Lanka

Graduated from the university of Kelaniya in 2016 with my degree in medicine and surgery.

#### Certificates

# **Digital Health: National Health System Planning /** Asia eHealth Information Network

December 2022

#### Intermediate course in FHIR / hl7.org

August 2022

#### Fundamentals course in FHIR / hl7.org

April 2022

#### **DHIS2 Android Implementation Level 2** / University of Oslo

March 2022

# **Certification in open health information exchange architecture** / Open Health Information Exchange

February 2022

#### **DHIS2 Tracker Configuration Level 1** / University of Oslo

February 2022

#### R Programming / Johns Hopkins University

DECEMBER 2021

• <u>Certificate</u>

# **Short Course on Research Methodology** / Postgraduate Institute of Medicine, University of Colombo

DECEMBER 2021

### DHIS2 Fundamentals / University of Oslo, Norway

AUGUST 2021

Certificate

#### Fundamentals in COVID19 / Osmosis.org

• <u>Certificate</u>

### **Teaching/Volunteering**

### Automation of Interoperable Digital Health Guideline Creation / Health Innovation Conference 2024

August 2024

Automation of FHIR - SMART Guideline Generation | Clinical Gui...

### Clinical Decision Support Systems in Clinical Informatics Module/ University of Applied Sciences and Arts Northwestern Switzerland

February 2024

#### **Database Management Systems / Lecturer**

February 2023

Postgraduate Institute of Medicine University of Colombo

### **Digital Health Convergence Workshop** / Resource person

December 2022

Certificate ID - DHCW2022-240 | https://slchi.lk/ecert

#### Open Source Health System Development / Resource person

Health Information Unit Knowledge Sharing Sessions - October 2021

Open Source Health System Development - Health Information U...

#### **Intensive Care Unit** / Medical doctor

May 2021 - August 2021.

During the height of the COVID19 pandemic in the country, I took two months off from my masters degree to volunteer as medical doctor at the COVID19 intensive care using at Base Hospital Kanthale.

#### **Publications**

### Knowledge and Perception of Artificial Intelligence in Medicine Among Undergraduate Medical Students in Sri Lanka: A Cross Sectional Study

DOI: 10.3233/SHTI250060 | Studies in Health Technology and Informatics (Link)

# Open-Source Approach to Disease Surveillance: Designing a Cost-Effective, Scalable Solution

DOI: 10.3233/SHTI250130 | Studies in Health Technology and Informatics (Link)

# Stakeholder Perspectives on Open Health Data: A Cross-Sectional Analysis

DOI: 10.3233/SHTI250066 | Studies in Health Technology and Informatics (Link)

### From Fragmentation to Open Access: Building an Open Data Portal for Health Data Dissemination

Studies in Health Technology and Informatics 2024 (Link)

# Design Open Source Health Information System in Low Resource Setting

Presented at the Geneva Digital Health Day 2024

### Enhancing Healthcare Interoperability: A case study on Sri Lanka's Fast Healthcare Interoperability Resources (FHIR) profiling

Presented at the National Health Research Symposium 2023

# Enhancing Interoperability in Sri Lankan Healthcare: A case study on Fast Healthcare Interoperability Resources (FHIR) hackathon

Presented at the National Health Research Symposium 2023

# Empowering Health Administrators With Data Driven Insights: A case study on open source decision dashboard

Presented at the academic sessions of Sri Lanka College of Health Informatics 2023

#### Towards Transparent Healthcare: Open Data Initiative in Sri Lanka

Presented at the academic sessions of Sri Lanka College of Health Informatics 2023