# JKSHAN EDIRISINGHE

♥ Toowoomba, QLD, Australia

@ rukshan.edirisinghe@gmail.com

# **OBJECTIVE**

To leverage my comprehensive technical skills and problem-solving abilities as an IT professional in a dynamic organization. I am dedicated to enhancing systems efficiency, implementing robust security measures, and delivering high-quality technology solutions that align with business goals and drive digital transformation.

# **SUMMARY**

Results-driven IT professional with a strong foundation in software development, database management, and IT project coordination. Skilled at translating technical requirements into effective solutions, ensuring secure and efficient operations. Recognized for excellent troubleshooting skills and a proactive approach to IT challenges.

# **EXPERIENCE**

#### Farm Hand

#### **Bony Mountain Farm (Darwalla Milling Co Pty Ltd)**

Queensland's leading poultry producer since 1933.

- IoT Applications in Farm Management: Experience in the farming industry provides a practical understanding of how IoT can be integrated into farm operations.
- · Data Science for Precision Agriculture: By collecting and analyzing farm data, such as crop yield, soil quality, and weather patterns.
- Machine Learning in Livestock Monitoring: Machine learning models could be employed to detect patterns and anomalies in livestock behavior, health, and growth.
- Environmental Monitoring and Climate Resilience: Farms are susceptible to climate variations.
- · Automation and Efficiency through IoT: The use of IoT sensors and automated machinery in farming can streamline labor-intensive tasks.
- Energy Management and Sustainability: Sustainable energy management is essential in agriculture to reduce operational costs and environmental impact.

# **EDUCATION**

# Master of Information Technology, majoring in Software Development and Research

### **University of Southern Queensland**

### Bachelor's in Information Technology

#### **University of Colombo**

**=** 2013 - 2014

Oclombo, Western Province, Sri Lanka

# Higher Diploma in Information Technology (HDIT)

# **University of Colombo**

**#** 2012 - 2013

Oclombo, Western Province, Sri Lanka

# Diploma in Computer Studies (DICS)

#### **Interative Data Management (IDM)**

**#** 2004 - 2005

Negombo, Western Province, Sri Lanka

# Diploma in Hardware and Networking

#### **Turnkey IT Training**

iii 2004 - 2004 ♀ Colombo, Sri Lanka

# **PROJECTS**

# Nursing and Midwife Job Match

# 08/2024 - Present 
● Toowoomba, Australia

#### A website designed to support the Australian graduate nurse and midwife

· Facilitated the smooth transition through tailored job match for each and every individual

# **Archery Competition Management** System

**iii** 06/2024 - 08/2024

Toowoomba, Australia

# Manage archery competitions, participants, judges, and scoring

· Analyzed and applied key OOP principles to optimize the code structure, enhancing modularity, reusability, and maintainability.

# Learning and Evaluation Management System

**=** 2022

Negombo

### Web Based Learning Solution for GCSE OL / AL | **IT Courses as Packages**

• Improved student learning and engagement on complex learning topics

# **EXPERIENCE**

# Computer Science Teacher, Subject Coordinator

#### St. Nicholas International College

Negombo, Western Province, Sri Lanka (2015--2017, 2020-2023)

Catholic International School governed by the Archdiocese of Colombo

- · Assignment Upload Program: Developed and implemented an assignment upload program, streamlining the submission and grading process for students and teachers.
- Computer Lab Management Software Solution: Offered a comprehensive computer lab management software solution that included auto shut-down, resetting user preferences and customizations on shutdown, and a selfmade activity pack to optimize lab usage.
- Synchronization Program for LK-Exam Online Learning System Developed a synchronization program for the LK-Exam Online Learning System to ensure data consistency and reliability.
- Practical Timetable Preparation for Computer Lab: Designed and implemented a practical timetable preparation system for the computer lab, enhancing the scheduling and allocation of lab resources.
- Tutoring and Evaluations: Cambridge University Computer Science Courses 9608, 9618, 2210 Examination students preparation.
- · Computer Language Support: Preparation of Pre-Release Materials for 2210, 9618 and 9608 Courses.
- · Programming language Support: Q-BASIC, Visual Studio, Python, SQL, HTML, JavaScript, PROLOG.

# Education Manager, Programmer and Software Developer

### **DNR Holdings PVT LTD**

**Technology Training Institute** 

- Data-Driven System Optimization: Analyzed system performance of DATA.
- · Identified areas improved leading to optimized workflows and increased
- · Business Intelligence and Reporting: Developed reporting systems and dashboards that provided insights into key business metrics, enabling datadriven decision-making for management.
- · Database Management and Integration: Managed and integrated databases.
- · Maintain DATA accuracy and consistency, which supported various business analysis and process automation initiatives.

#### IT Lecturer | Course Coordinator

### **E-Soft Metro Campus**

Private Educational Institute

- · Curriculum Development and Instruction: developed and instructed computer science curriculum.
- Programming Languages: (Python, C#, PHP), database management (MySQL, SQL Server) and software engineering modules.
- · Technology Integration in Learning: Implemented digital tools and platforms to enhance the interactive learning experience, including developing online resources and supporting both on-site and remote learning environments.
- IT Infrastructure Management: Managed the maintenance and upgrading Project Guidance and Support: Provided guidance on numerous final year
- Increased student retention by 25% through engaging, high-impact teaching approaches and updated course materials.

# **PROJECTS**

# Web-Based Software Automation for Training Management

**=** 2013 - 2014 **♀** Colombo

#### **BIT Final Year Project at DNR**

- · Analyze company training data set and designed a data model
- Designed and Implement codes and algorithms for line and bar charts from the scratch in PHP

# Computer Lab Management Software

**=** 2021 - 2022 Negombo

### Automated centralized control of PCs via network management

· Programmed to automate PCs to enhance individual student engagement.

# Loyola College Website

#### AJAX, HTML, CSS and XML

• Designed and complete entire life cycle of the website by analyzing the previous web for data models

# **STRENGTHS**



#### **Extensive Teaching Experience**

Over 25 years in ICT education, delivering multi-mode courses and developing industryrelevant curricula.



#### Industry Knowledge and Practical Insight:

Strong understanding of computing applications in real-world environments



# **Curriculum Design and Pedagogical Skills**

Proven ability to design adaptable, multimodal curricula that accommodate diverse learning needs and styles



# Research-Oriented Mindset

Engaged in current academic research with an interest in Data Science, Machine Learning, and IoT



#### **Collaborative Approach:**

Experience working with cross-functional teams and stakeholders, which facilitates effective collaboration with colleagues



### **Future-Focused Mindset**

Eager to pursue a PhD and contribute to emerging fields in Computing, which aligns with the University's strategic goals

#### **PASSION**



**Data-Driven Decision Making** 



**Innovative Data Visualization** 

# **EXPERIENCE**

# IT Teacher and Centre Manager

#### **Loyola College**

Catholic Educational Institute

- **Lesson Plan and Evaluations:** Assisted in the creation of lesson plans that aligned with state standards, aiding in a 15% uptick in student success rates.
- Computerized Examination for the MS-Office Course: Developed and implemented a computerized examination system for the MSOffice course, enhancing the efficiency and accuracy of assessments at Loyola College.
- Stage Wise Student Learning System: Designed a stage-wise student learning system to track and support student progress, ensuring a structured and incremental learning experience.
- Automate an Office Printing Task of an Annual Event (Loyola College):
   Significantly reducing manual effort and streamlining the printing process.
- IT Exhibition Stall Projects: Coordinated and showcased 8 individual student projects at the Loyola Exhibition IT Stall in 2009.

# **REFERENCES**

#### Dr Taotao Cai

Lecturer (Computing) Toowoomba Campus (Office D205D) University of Southern Queensland

+61 7 4631 1093 (Ext: 1093) Taotao.Cai@unisq.edu.au

### **Dr Thong Nguyen-Huy**

Research Fellow TA225, Toowoomba Campus, University of Southern Queensland

+61 7 4631 5362 (Ext: 5362) Thong.Nguyen-Huy@unisq.edu.au

# **PASSION**



Al, Machine Learning and Research



IoT, Robotics and Game Development

# **TECHNICAL SKILLS**

Networking

Cybersecurity

Supervision

**Cloud Computing** 

**Software Development** 

**Games Development** 

**Research and Publication** 

**Data Science** 

**Computing Curriculum Design** 

**Multi-Mode Teaching** 

**Machine Learning** 

**IT Services** 

**Mathematics**