

# ETHAN PERERA

# READING IN BSC (HONS) ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

## **PROFILE**

As an undergraduate in data science, I excel in designing user-friendly interfaces for applications and websites. I believe I am skilled in understanding user issues and providing effective solutions, including automating repetitive tasks to enhance efficiency while curating datasets. My expertise lies in streamlining processes to save time and improve productivity.

### **WORK EXPERIENCE**

#### **Gateway College**

2020~2022

Editor/Designer for Gamer.LK

- Gained experience in designing and editing posters for live streams and events while studying at Gateway.
- Worked under Gamer.lk, handling tasks under tight time constraints.
- Successfully created designs and videos that attracted significant attention, including from major organizations like Dialog and SLT.
- Link to YouTube channel

### **Metamorph Global**

2023 (March to May)

Associate data automation engineer

- Solely tasked with automating data collection from sites like LinkedIn.
- Utilized tools and libraries such as Beautiful Soup and Selenium for web scraping.
- Automated data cleaning using custom software and Excel Macros.
- Managed and led the entire project independently over one month.
- Spent an additional month troubleshooting to ensure the software functioned as intended.

### Questas Global/ BCS Technology

2023 (April to January 2024)

Customer support engineer

- Worked as a customer support engineer, collaborating with a team to contact users and enforce policies.
- Participated in weekly sessions to plan and align tasks for the week.
- Took responsibility for initializing and implementing some policies in coordination with the team.
- Managed license assignments, including reassigning Microsoft licenses across user groups.
- Gained hands-on experience in Active Directory group management, customer support troubleshooting, and resolving RDP session issues.
- Developed a diverse skill set through team collaboration and consistent troubleshooting efforts.

## CONTACT

- +(94) 76 245 7156
- ethan.christoff@gmail.com
- in linkedin.com/in/ethan-perera
- c github.com/ethanchristoff

## **EDUCATION**

## 2023~2027 ROBERT GORDON UNIVERSITY

 Bachelors of Al & Data Science

### 2009~2022 GATEWAY COLLEGE

- Pearson's Qualification in computer science/ICT
- Ordinary Levels in Math's and Computer Science
- General Academics

## **SOFT SKILLS**

- Project Management
- Public Relations
- Teamwork
- Time Management
- Leadership
- Effective Communication
- Critical Thinking

## LANGUAGES

- English (Fluent)
- Singhala

## **EXPERTISE**

- Basic knowledge of data representation using R Studio.
- Though rough understanding of CSS and HTML.
- Useful skills in implementing JavaScript and adhering to coding standards for group projects on GitHub.
- Developed skills in using
   GitHub for version control
   to backtrack, manage
   versions, and release stable
   applications.
- Strong understanding of Java and Python.
- Adept understanding of Machine Learning concepts and theories
- Though rough understanding of data curation techniques, etc

# PROGRAMMING LANGUAGES

- Java (Very proficient)
- Python (Very proficient)
- CSS
- HTML
- Java Script
- PHP (amateur but proficient)
- SQL

## **FRAMEWORKS**

- Selenium (for automation)
- JDA (Java Discord API)
- JavaFX (application development)
- Flask and Django (for web based implementation)

# **Rizing (IT Services and IT Consulting)** 2024 (July to August 2024) Summer Intern

- Participated in a month-long summer internship program featuring sessions with high-ranking professionals who shared their experiences and advice.
- Gained exposure to various companies, learning about their work culture and the skills required to succeed.
- Introduced to the concepts of ABAP and SAP, gaining foundational knowledge in these technologies.
- The internship served as a gateway to the industry, providing valuable insights and practical exposure.

## ACADEMIC EXPERIENCE (IIT)

# Web Technology - Group Project for Medical Site

2024 (JAN) ~2024 (MAY)

 Developed a dynamic, functional website using JavaScript, HTML, and CSS for coursework. Gained skills in project management, Git, and version control fundamentals.

### **Programming Fundamentals - OOP**

2023 (Sept) ~2024 (May)

- Enhanced Python and Java skills, enabling the development of applications using JavaFX and SceneBuilder, with confidence in IntelliJ and VS Code.
- The second coursework introduced sequence and class diagrams for system design and involved building a news article recommendation system. This project integrated a language model from Ollama, utilized threading and concurrency for efficiency, and enhanced skills in Aldriven solutions and application performance optimization.
- Link to first JavaFX application
- Link to second application with ollama

# Data Structures & Algorithms - Path Finding Algorithm Application

2024 (Jan) ~2024 (May)

 This module introduced fundamental data structures like stacks, queues, and linked lists. For coursework, I developed a robot pathfinding algorithm using A\* with custom data structures, including a priority queue and a doubly linked list. Additionally, I gained an understanding of time and space complexity, emphasizing efficient code and optimized processing.

# Mathematics for computing & machine learning

2023 (Sept) ~2024 (December)

- Module CM1606 provided a solid foundation in statistical data analysis using mathematical techniques. It introduced data representation through R Studio, enhancing my ability to curate and present data effectively. The module offered a comprehensive overview of statistical analysis and data engineering.
- Additionally, Module CM2603 introduced me to tools and frameworks like Matplotlib, Seaborn, and NumPy, as well as advanced concepts such as Fourier Transform and Fourier Series for image manipulation. It also covered complex mathematical theories essential for machine learning, further broadening my understanding of data analysis and computational techniques.

## LIBRARIES (PYTHON)

- Sympy
- Seaborn
- Matplotlib
- SciKitLearn
- Numpy
- OpenCV
- Pandas
- TensorFlow
- Imblearn (for dataset balancing)

## ACADEMIC EXPERIENCE (IIT) CONTINUED

### **Machine Learning**

2024 (Sept) ~2024 (Dec)

- In this module I was introduced to the concepts of machine learning and data curation, I had covered complex learning algorithms such as random forests, neural networks, Support Vector Machines and clustering for data minimization
- Furthermore, I was introduced to the process of dimensionality reduction such that I now know how to merge features such that it may deduce the overall size of a dataset while retaining its initial data values
- Thereafter, I was given a coursework to curate a bank-marketing dataset and to then develop a neural network and random forest classifier to predict if a person is to make a deposit or not
- Some issues I had experienced and solutions I had implemented in the module include:
  - Class Balancing through SMOTE and Bagging
  - Bias assessments
  - Hyperparamter tuning during cross validation assessments
  - Handling outliers (e.g. implementing winsorizing)
  - Assessing optimal features through information gain
  - Implementing dimensionality reduction techniques such as PCA to minimize feature ranges
- Link to machine learning coursework

## ACADEMIC EXPERIENCE (GATEWAY COLLEGE)

## Kindergarden - Grade 12

2009 (Sept) ~2022 (Dec)

- Developed strong soft skills through teamwork, leadership, and effective communication. Honed mathematical prowess, applying it to problemsolving and computational tasks. Excelled in computer science with a focus on AI, programming, and system development.
- Played basketball for the team for two years, demonstrating teamwork, strategic thinking, and resilience during competitive matches. Actively pursued swimming, highlighting discipline, physical fitness, and commitment to personal growth.
- Scored 3 A\* for my Edexcel ordinary level examinations for:
  - Maths
  - Computer Science
  - Psychology
- Furthermore, I was a part of the Gateway College Senior Brass Band as to where I had attended multiple promotional and awarding ceremonies to play for them (sports meets included)
- Thereafter, I had attended multiple volunteering events that were hosted by the school and computer science society. Not to mention that I was also one of the founding members for the Esports society in school hence making me one of the leading editors

#### REFERENCE

#### **Thushara Perera**

Network Lead at Wiley

Phone: 077 363 5861

Email: thushara.perera@gmail.com

## Maas Savanghan

Global COE Leader- Learning and Development

at Rizing

Phone: 077 776 7027

Email: Maas.Savanghan@rizing.com

## Vishmi Embuldeniya

Wardiere Inc. / CEO

Phone: 074 392 2341

Email: vishmi.e@iit.ac.lk

#### Ishani Mirihagalla

Associate Consultant - Learning and

Development at Rizing **Phone:** 076 317 1623

Email: Ishani.Mirihagalla@rizing.com