ISURU LAKSHAN KASTHURI ARACHCHI

SUMMARY STATEMENT

Dedicated and compassionate towards technological advancement of agriculture. Expertise on developing Innovative and cost-efficient technical solutions using data analysis tools. Have skills in creative designing tools also. Above all, eager to accomplish goals using written and verbal communication abilities and with team working attitudes.

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DoB: 1995-09-25

No 65, Galamuna, Menikhinna

EDUCATION HISTORY

MPhil on Soil Science
Topic: evelopment of Machine-learning Models to Predict Soil Hydraulic Properties of Soils of Sri Lanka
**Post Graduate Institute of Agriculture, UoP.
(Currently enrolled)**

MSc. Data Science
University of Kingston (Distinction pass)

BSc. Agricultural Technology and Management
University of Peradeniya (2018 - 2022)
- Second-class upper-division honours
- Soil and Environment majoring module

RESEARCHES

Development of a low-cost soil moisture sensor and a companion mobile application for data storing and analyzing
- For the research project of the Agricultural Technology and Management degree program. (Developed using Arduino & React Native)

Development of Deep-learning Models to Predict Soil Hydraulic Properties of Soils of Sri Lanka
- For the MPhil project (currently working on) (Developed using Python, Scikit-learn, Tensorflow)

SOCIETIES, CLUBS

- **Editor, Postgraduate Agriculture Students' Association**
  Postgraduate Institute of Agriculture (2023)
- **President, Soil Science Society**
  Faculty of Agriculture (2021 - 2022)
- **Chief organizer, Robobots Society**
  Faculty of Agriculture (2021 - 2022)
- **Editor, Buddhist Brotherhood Society**
  Faculty of Agriculture (2020 - 2021)

RELEVANT SKILLS

Data Science & Analytics
- **Languages:** Python, SPSS
- **Libraries/Tools:** NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, TensorFlow, Keras, SHAP
- **Data Handling:** Data cleaning, analysis, visualization, reporting
- **Database Management:** MySQL, MongoDB, PostgreSQL
- **Statistical Analysis & Machine Learning:** Regression, classification, model evaluation, Excel + Power BI dashboards
- **GIS & Land Suitability Tools:** Basic GIS operations, spatial data collection for agri use cases

Programming & Development
- **Languages:** Python, JavaScript, PHP, C++, HTML/CSS
- **Frameworks:** FastAPI, Flask, Node.js, React, CodeIgniter, Laravel, WordPress, Svelte
- **Desktop Apps:** Tkinter, PySimpleGUI
- **Mobile Apps:** React Native
- **Automation:** Google AppScript, Excel VBA

Web & Software Engineering
- **Web Dev**: Hugo, Bootstrap, Svelte, REST APIs
- **DevOps:** Git, GitHub, Docker, Nginx, Linux server management, CPanel

Additional Technical Skills
- Electronics: Arduino, Proteus
- Design & Media: Graphic design, desktop publishing, video editing

WORK EXPERIENCE

Temporary Lecturer - Dean's Office, Faculty of Agriculture 2023 – Present
- Delivered optional undergraduate courses on Python, Canva, Data Analysis, Software Development, and Arduino.
- Managed the faculty website (PHP/CodeIgniter, Bootstrap): performed regular backups, added new pages/features, and resolved bugs.
- Developed the Kiosk website, CMS, inventory system, and POS data visualizer using PHP/CodeIgniter, Python (Tkinter, Pandas).
- Data Collection Web App: For collecting and exporting departmental/research data of Faculty of Agriculture with Excel report generation.
- MBA Program Website (Ongoing): Professional site for PGIA's MBA program with admin panel for easy updates.
- Student Attendance System (Deprecated): Google AppScript-based tool for rapid class attendance and web-based student login access.
- Ticket checking system (barcode scanner) for Indeewari Music Event– React Native, PHP, MySQL
- Tools and automations using Excel VBA, Google Apps Script, and Notion

Freelancing activities
- Website for DND International Co. Ltd: A vehicle import business site featuring listings, customer inquiry system, and admin-controlled inventory & wishlist management.
- Modification of the website of Institute of Management of Sri Lanka (Custom wordpress)

VOLUNTEER WORK

- **Web sites development**
  www.ssssl.org - for Soil Science Society of Sri Lanka (WordPress)
  www.biodynamicsrilanka.org - Biodynamic Association of Sri Lanka (BDASL)
  www.sithmansala.netlify.app - "Vesak Kalapaya" for Buddhist Brotherhood Society
- **Magazines designing**

  Soil for Life magazine (2020, 2021, 2023) - Department of Soil Science, Faculty of Agriculture
  Sithmansala magazine (2020 April, May, June) - Buddhist Brotherhood Society
- **Video editing**
  Fertilizer TechTalk video series - Soil Science Society, Faculty of Agriculture
- **E-book creation**
  Proceedings of the Faculty of Agriculture Research Symposium
  www.proceedings.netlify.app
- **Social media post designing**
  For student society activities, Soil Science Society of Sri Lanka

SPORTS

- **Freshers meet - University of Peradeniya (2019)**
  Football (3rd place)   Taekwondo (3rd place)
  Wrestling (3rd place)

REFERENCES

Prof. R.S. Dharmakeerthi,
Professor,
Department of Soil Science,
Faculty of Agriculture,
University of Peradeniya
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Dr. D.N. Vidana Gamage,
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