

Ashala Senanayake

Software Engineer · Full-Stack · ML/AI

Bridging robust engineering with applied machine learning



Contact

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Personal Details

Nationality Sri Lankan
Born 27/06/1994
Address Kyoto, Japan

Technical Skills

Programming Languages	Python, Java, C
Web Development	HTML5, CSS3, JavaScript, Vue.js, Node.js
AI & ML	PyTorch, Hugging Face, OpenPrompt
Cloud Services	Amazon Web Services (EC2, S3, RDS, ECS), Docker
Databases & Big Data Tools	MySQL, Oracle PL/SQL, Apache Kudu, Apache Impala, Apache Spark, NiFi, Elasticsearch
Version Control	Git - branching, rebasing, PR workflows, CI/CD automation, linting, and secret management

Profile

Software Engineer with 6+ years of experience delivering production-grade applications across full-stack development, cloud platforms, and applied machine learning. Holds a Master's focused on AI, NLP, and healthcare, with a strong foundation in building scalable, reliable, and research-driven software solutions.

Experience

Full-Stack Software Engineer JUL 2023 — PRESENT
Tamai Investment Education Inc. Kyoto, Japan

- Build and maintain a web platform used by Japanese cram schools to manage operations, student progress, and educational materials.
- Design and implement frontend interfaces and backend business logic across the stack using Vue.js and Node.js.
- Own features end-to-end from requirements through deployment working directly with stakeholders in a Japanese-language environment.

Software Engineer MAY 2021 — JUN 2023
London Stock Exchange Group Technology. Malabe, Sri Lanka

- Contributed to the Surveillance System, a platform for detecting market misbehavior across global exchanges.
- Built data-integration pipelines between on-premises systems and Amazon RDS using AWS services, and migrated Oracle databases to the cloud.
- Owned and maintained the Global Data Lake (GDL) ingestion process.
- Served as developer lead, delivering customer change requests within agile sprints.

Software Engineer MAR 2020 — MAR 2021
IFS R&D International Pvt. Ltd. Sri Lanka

- Developed long-range scheduling enhancements for Fleet Planner, an aircraft maintenance scheduling products used by commercial airlines.
- Implemented features using IFS Aurena and Oracle PL/SQL.

Education

M.Eng. Digital Health Informatics

Kyoto University of Advanced Science
(KUAS), Japan
EXPECTED SEP 2026

B.Sc. Information Technology

University of Moratuwa, Sri Lanka
DEC 2020

Awards & Honors

2025	Most Trending Paper Mention, HEAL@CHI '25
2025	Honorable Mention, Best Poster, HEALTHINF 2025
2024	KUAS-E Scholarship for Master of Engineering
2018	Best Paper Award, IEEE Region 10 HTC
2018	Best Young Author Award, IEEE Region 10 HTC

Competitions

2018	1st Runner-up, Mora Ventures 3.0
2017	1st place in IESL YMS Hackathon

Referees

Dr. Zilu Liang

Associate Professor,
UbiComp Lab, KUAS, Japan
liang.zilu@kuas.ac.jp

Dr. Sidath Liyanage

Professor,
University of Kelaniya, Sri Lanka
sidath@kln.ac.lk

Trainee Software Engineer

JAN 2019 — MAY 2019

Virtusa Pvt. Ltd. Sri Lanka

- Integrated a code-analysis framework with the Virtusa Gamification Server (ERA Insight, Global Technology Office), enabling automated developer-performance insights.

Visiting Lecturer

2020/21 & 2021/22

Esoft Metropolitan Campus · Sri Lanka

- Taught Web Development, Database Systems, and Artificial Intelligence modules.

Academic Projects

CIERTe

2 Year Masters Project

Kyoto University of Advanced Science

A time-aware framework for mental-health screening from social-media data. Models how users' emotional states evolve over time despite irregular posting, using specialized contextual embeddings, and analyzing long-term trends rather than individual posts to improve anxiety detection and monitoring.

Sinhala E-News Enhancer

1 Year Undergrad Project

University of Moratuwa

A semantic-search module built with NLP. Designed an ontology to model domain knowledge and built pipelines for entity extraction, concept mapping, and structured knowledge representation improving retrieval by semantic relevance rather than keyword matching.

Publications

2026: [Senanayake A.](#), & Liang, Z. CIERTe: Continuous Inter-Event Relative Temporal Anchoring for Anxiety Detection from Social Media Posts. 17th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM BCB)

2025: [Senanayake A.L.](#), Liang Z., Anxiety Detection in Reddit Posts Through Emotion Dynamics Analysis. In Proceedings of the 18th International Conference on Health Informatics (HEALTHINF 2025). [Honorable Mention for Best Poster Award]

2024: [Senanayake A.](#), & Liang, Z. (2024, October). Time Series Analysis for Social Media Anxiety Detection: A Mini Review. In 2024 IEEE 13th Global Conference on Consumer Electronics (GCCE) (pp. 1006-1007). IEEE.

2023: [Senanayake A.L.](#), & Liyanage, S. (2023). A narrative review on human anxiety detection in social media using natural language processing. Journal of Desk Research Review and Analysis 1.2 (2023)

2018: [Senanayake A. L.](#), Priyadarshana, Y. P., & Ranathunga, L. (2018). Nouns Speak: A Novel Approach for Noun Sentiment Scoring. In 2018 IEEE Region 10 Humanitarian Technology Conference (pp. 1-6). IEEE.