

Sathmi Liyanage

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EDUCATION

Stanford University

B.S. Computer Science, GPA: 4.0/4.0

Stanford, CA

Expected June 2029

EXPERIENCE

Software Engineering Intern

April 2026 – Present

Conscisys

Remote

- Built a crawler for the Illinois Compiled Statutes, processing 14,249 government web pages into a structured corpus of 2,798 acts and 47,242 statute sections for an AI-assisted judicial assistant
- Added deduplication to a court case-metadata ingestion pipeline, eliminating repeated CMS activity records before embedding and indexing in Qdrant
- Migrated a 12-endpoint distributed case-integration service from SOAP/XML to REST/JSON in Java/Spring Boot, maintaining backward compatibility for existing DuPage County court-record clients

Research Assistant

April 2026 – Present

Stanford University, Heller Laboratory

Stanford, CA

- Validated a Python sleep-stage classifier against expert-scored labels across 2.0M+ epochs from 47 recordings, achieving 93.7% agreement and Cohen's κ of 0.88
- Identified a dose-dependent model failure masked by aggregate metrics, using mixed-effects and time-binned analyses to uncover a drop in REM classification accuracy from 77% to 19%

Incoming CS106B Section Leader

September 2026

Stanford University Department of Computer Science

Stanford, CA

- Selected to teach data structures and programming methodology to a weekly section of 5–10 students in Stanford's introductory programming sequence beginning Fall 2026, and provide 1:1 debugging and code review to 100+ students across office hours

PROJECTS

Tried & Told | Go, Python

- Built a disk-backed vertical search engine for first-person product reviews, implementing an inverted index with BM25 ranking, delta/varint-compressed postings, positional phrase search, and segment-based garbage collection
- Fused BM25 with HNSW-based semantic retrieval via Reciprocal Rank Fusion, served through a Go API; sourced 835 reviews from 45 sites via a crash-resumable crawler with Bloom-filter/SimHash duplicate detection, validated by 163 automated tests

Stackd | React, JavaScript, Supabase

- Architected and shipped Stackd (getstackd.app), a full-stack product-rating platform using React and Supabase, with authentication and row-level security enforcing per-user data access
- Developed an OpenAI-powered ingredient-analysis pipeline using Supabase Edge Functions to score and rank a catalog of 432 product variants across 24 brands

RESEARCH & LEADERSHIP

University of Kelaniya | First-Author Researcher

2023 – 2025

- Built and analyzed an original craniofacial dataset from Sri Lanka's Indigenous Vedda community; published the resulting analysis as first author in the *International Journal of Morphology*

WHO WE ARE | Nonprofit Founder

2022 – Present

- Founded a storytelling nonprofit amplifying 50+ first-person narratives from marginalized and historically underrepresented communities across 7+ countries, earning coverage in The Sunday Times

TECHNICAL SKILLS

Languages: Python, Go, JavaScript, Java, C++, SQL

Frameworks: React, Spring Boot

Databases & Tools: PostgreSQL, MySQL, Qdrant, Supabase, Git, REST APIs, OpenAI API