

GIOVAN CHRISTOFFEL SIHOMBING

iOS / Apple Developer

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Professional Summary

Computer Engineering graduate and Apple Developer Academy learner developing application logic and AI features for iOS and macOS. Combines data collection and model development with Core ML integration, Swift/SwiftUI prototyping, and collaborative technical delivery across Apple-platform projects.

Technical Skills

- **Apple Platforms:** Swift, SwiftUI, Core ML, Vision, AppKit, Xcode, SwiftData, XCTest, PencilKit, ARKit, RealityKit, AVFoundation.
- **AI and Systems:** Python, data preparation, model training, MLX, REST APIs, PostgreSQL, Docker, Git.

Selected App Projects

AniMagic

iOS Developer / AI and Application Systems

Jul 2026

- Built the sketch classifier and Core ML integration for a SwiftUI/PencilKit-to-AR team prototype; handled data preparation, model selection, training, and evaluation.
- Prepared 840,000 training examples from Google Quick, Draw! across 49 classes: 48 animal species and one aggregated non-animal class.
- Reached 85.14% overall top-1 across 49 classes including *other* on held-out Quick Draw data (24,500 examples per validation/test set), not PencilKit-user accuracy.

Lawtionary

macOS Developer / AI and Application Systems

Aug 2026 – Sep 2026

- Built local-first legal-draft review and terminology lookup in Swift/SwiftUI/AppKit; prepared the September 2026 corpus (2,982 term groups; 2,589 selected concepts).
- Integrated BM25/multilingual-E5 retrieval and local Qwen3.5 4B Base/MLX for candidate review, with source checks, output validation, fallback, and user-approved edits.
- Tested with students, corporate lawyers, and government legal personnel; prioritized Dictionary updates from student feedback and available development time.

Worthly

iOS Developer

Jun 2026

- Built a local-first SwiftUI personal-finance prototype covering assets, liabilities, investments, and transactions, with reusable interface components.
- Implemented local JSON persistence, a dummy-data mode, and a planning projection engine with unit tests to support development and demonstration of the financial workflows.

HollaDawg

iOS Developer

Apr 2026

- Built a SwiftUI prototype for discovering and booking language-exchange partners, including language filtering, matched profiles, and appointment scheduling.
- Implemented upcoming-session views, reusable interface components, and an AVFoundation-based video-call interface within the prototype.

Professional Training

Apple Developer Academy Learner

Apple Developer Academy @ UC

Jakarta, Indonesia

Feb 2026 – Present

- Explore opportunities, research users, design interfaces, and develop Apple-platform apps; now on a fifth team project, helping keep discussions focused and work aligned with timelines.

Education

Bachelor of Engineering in Computer Engineering

Universitas Indonesia

Depok, Indonesia

Aug 2022 – Aug 2026

- GPA: 3.67/4.00. AEON 1% Club Scholarship recipient in 2024 and 2025.

Work Experience

Assistant Researcher (Part-time)

Monash University, Indonesia Campus

Tangerang, Indonesia

May 2026 – Present

- Develop Python and Google Cloud Storage workflows for chest X-ray dataset curation, DICOM preprocessing, image-report pairing, and multi-source metadata harmonization; contribute to JAX/Flax NNX baseline/domain-shift experiments on TBX11K/CXR-RAIT; run a fixed-split 470-image Google Cloud TPU reconstruction pilot; and build distilled CheXAgent vision-language inference tooling for TB-Xdar via Replicate/Cog, supporting DICOM inputs and clinician-reviewed reporting.

AI Engineer Intern

Tripleize Co., Ltd.

Minato-ku, Japan

Feb 2026

- Investigated mathematical image-analysis and segmentation-model approaches for assessing food plating quality, including positioning and arrangement, without external AI APIs or large language models.
- Documented explored approaches, implementation observations, and limitations in an internship report.

Laboratory Assistant / Laboratory Coordinator

Digital Laboratorium, Universitas Indonesia

Depok, Indonesia

Aug 2023 – Jan 2026

- Coordinated approximately 12 assistants and departmental administration for equipment, rooms, and assistant compensation.
- Built a Node.js/Docker e-library that remains in use; administered supporting Proxmox servers.

Additional Engineering Experience

Federated Learning for Chest X-Ray Classification

Undergraduate Thesis / Individual Project

Aug 2025 – May 2026

- Built a 38-output chest X-ray experiment pipeline; compared five frameworks in simulation and deployed FedBioMed across five heterogeneous physical devices.
- Orchestrated 30 FedAvg/FedProx runs across three resolutions and five seeds; built dashboards for setup, registration, and monitoring. This was an engineering study, not clinical validation.

eVoting Pemira FTUI

Lead Backend Engineer

2024

- Developed the Node.js/Express.js and PostgreSQL backend used by more than 2,700 voters in FTUI's 2024 election.
- Assigned work by component confidentiality; implemented Redis caching, JWT authentication, logging, and Docker deployment.

Leadership Experience

Vice President

EXERCISE FTUI, Universitas Indonesia

Depok, Indonesia

Jan 2024 – Jan 2025

- Coordinated six technical projects and seven workshops; organized an industry visit with XL Axiata's IoT division.

International Experience

TWINCLE Exchange Program

Chiba University

Chiba, Japan

Dec 2025 – Feb 2026

- Received JASSO scholarship support and collaborated with international peers on a presentation about local food waste.

Languages

Indonesian (Native) | English (Professional) | Japanese (Conversational; JLPT N3, 2025)