# Ahmad Ghalib Athariq

@ alib.athariq@gmail.com | 🔰 +62 812-6471-0451 | 🏶 Website | 🛅 LinkedIn | 🗘 GitHub | 🗣 Medan, Indonesia

#### Introduction

A programmer specializing in systems-level development and AI/ML. Enjoys learning across domains and working on problems that demand both technical depth and curiosity. Deeply interested in opportunities to build practical, reliable systems that contribute to meaningful progress.

#### Education

#### **Universitas Sumatera Utara**

Medan, Indonesia

BS in Computer Science (S.Kom.)

Sep 2021 - July 2025

- GPA: 3.67/4.0
- Thesis: End-to-End Multi-Task Deep Learning using SSDLite-MobileViT for Estimating Lettuce (Lactuca Sativa) Growth Phenotypes from RGB-D Images
- Coursework: Computer Organization & Architecture, Algorithms and Programming, Algorithm Design and Analysis, Data Structures, Database, Computer Vision, Object Oriented Programming, Computer Networks
- Advisors: Dr. Pauzi Ibrahim Nainggolan; Seniman S.Kom., M.Kom.

# **Work Experience**

# PT Xtend Integrasi Indonesia (software house)

Medan, Indonesia

Backend Developer

Nov 2024 - Jan 2025

- Developed secure web APIs for a TNI AD's information system and an in-house ERP product.
- Collaborated closely with the team lead to ensure correct delivery of requested features.

#### GeometriSatu Studio (game development team)

Medan, Indonesia

Game Developer Intern

Sep 2024 - Nov 2024

- Developed and designed a reward-based educational mobile game (ScienceOne) in the Unity Game Engine.
- Participated in weekly meetings with the project manager to discuss progress.

# PT Len Industri (Persero) (defense technology company)

Bandung, Indonesia

Desktop Developer Intern (Magang Merdeka)

Feb 2024 - Jun 2024

- Accelerated Link Monitoring & Control (LMC) application development toward operational readiness by successfully integrating it with the company's proprietary Data Link Processor software.
- Developed network socket-level systems designed by the lead software engineer.
- Developed comprehensive unit tests for new and existing modules.
- Enhanced software stability and reliability by meticulously analyzing output logs to identify and resolve critical bugs.

#### Revolutionary Games Studio (game development team)

Online-based (international)

Volunteer Programmer

Jan 2020 - 2024

- Spearheaded development of gameplay features, user interface and contributed bug fixes.
- Contributed over 350+ commits and 400k line additions to the codebase accelerating the development of the game in 3-year span.
- Ensured codebase quality and maintainability by performing rigorous code reviews on pull request submissions to the project's GitHub repository.

## **Projects**

**Portfolio:** www.athrqlib.my.id/projects (for additional information and projects)

#### **Lettuce Plant Growth Estimator**

- Engineered an efficient, mobile-first computer vision solution to enable non-destructive estimation of lettuce growth-related phenotypes, potentially supporting low-cost precision agriculture methods.
- Designed a modified lightweight SSDLite-MobileViT (Mehta & Rastegari, 2022) deep learning model with <10 M parameters, utilizing dual-branch architecture.
- Successfully ran model on-device with inference time of <600 ms/frame, qualifying for near real-time application.
- Tools Used: PyTorch, OpenCV, ExecuTorch, Android

## Upahkita.id: Indonesian Salary Data Platform (active 2024 - Jun 2025)

upahkita.id

- Conceptualized and single-handedly engineered a full-stack data platform to provide transparent, geographically-visualized salary data for the Indonesian market. Was deployed to a \$3/mo VPS.
- Developed PostgreSQL change data capture (CDC) middleware to support full-text search microservice using Go.

- Made to prove that building a full-blown end-to-end web app is possible alone and efficiently, by using today's tech stacks.
- Tools Used: Next.js, TypeScript, Golang, PostgreSQL, Meilisearch

# MixTime: e-Menu Platform (active until Dec 2024)

mixtime.rf.gd

- Developed a web-based soft-drinks menu for a F&B shop with admin (CRUD) functionalities.
- Utilized third-party image hosting service's (ImgBB) RESTful API to store product images off-site.
- Tools Used: Laravel, Livewire, PHP, MySQL, TailwindCSS, HTML/CSS, Git

## **Space Shooter Game (CMD-based)**

**G** Link

- Developed a Windows-native game, fully running on a command-prompt window.
- Integrated DirectSound to create a custom audio engine.
- Tools Used: Windows API (WinAPI), C++, CMake, Visual Studio

# Organization

#### Ikatan Mahasiswa Ilmu Komputer USU, Communications and Information Staff

Sep 2023 - Sep 2024

- Initiated a design overhaul of IMILKOM USU's official website: imilkom.usu.ac.id
- Skills: Trello, Teamwork, Communication, Responsibility, Patience

### Google Developer Students Club (GDSC) USU, Member

2023 - 2024

# **Skills**

Languages: Indonesian - Native, English - Bilingual

**Programming Languages:** C#, C++, Java, Golang, Python, TypeScript/JavaScript **Technologies:** PyTorch, ExecuTorch, MySQL, PostgreSQL, Meilisearch, Gradle, .NET

Developer Tools: Git, Docker, VSCode, Visual Studio, Linux, CMake

Other: Writing, Badminton, Visual Arts