

# AMAL GODWIN J

📍 Coimbatore, India | 📞 +91 6374484675 | [amalgodwin004@gmail.com](mailto:amalgodwin004@gmail.com)

[in linkedin.com/in/amal-godwin-j](https://www.linkedin.com/in/amal-godwin-j) | [github.com/AJgodwin](https://github.com/AJgodwin)

## EDUCATION

### Amrita Vishwa Vidyapeetham

Bachelor of Technology in Computer Science & Engineering

CGPA: 6.39

Coimbatore, India

Aug. 2023 – Aug. 2027 (Expected Graduation)

## TECHNICAL SKILLS

**Languages:** Python, Java, JavaScript

**AI/ML:** PyTorch, OpenCV

**Data Science:** Pandas, NumPy, Matplotlib

**Web Development:** HTML, CSS, React, Node.js, Express.js

**Databases:** MongoDB, MySQL

**Dev Tools:** Git, GitHub, VS Code, Firebase

## PROJECTS

### Federated Learning Simulation for Edge Networks | Python, YAML, JSON

Sep 2025

- Re-implemented and simulate a client selection approach for Clustered Federated Learning over wireless edge networks.
- Analyzed distributed learning algorithms in a simulated large-scale network, relevant to the architecture of global processing systems like VisaNet.
- Demonstrated the ability to manage a project from theoretical concept to practical simulation..

### Smart-Pill-Dispenser | C

Sep 2025

- Developed an automated medication management system designed to assist elderly patients and caregivers in tracking and dispensing pills.
- Implemented core dispensing logic in C, utilizing hardware-software integration to manage scheduled medication intervals and dosage accuracy.
- Designed a user-centric notification system to provide real-time alerts, ensuring patients adhere to their prescribed medical regimens.
- Created a structured technical framework and case study documentation to validate the system's reliability in practical healthcare scenarios.

### Neural network from scratch | Julia

Aug 2025

- Built a neural network in Julia from scratch using ReLU activation and gradient descent for training.
- Implemented core perceptron inference and learning algorithms without external libraries..

## ADDITIONAL INFORMATION

**Languages:** English, Tamil

**Soft Skills:** Communication, Critical Thinking, Adaptability, Team Collaboration

## DOMAINS OF INTEREST

Front-end and Backend Development, Machine Learning