

# AMIR PHILIP ADAM

ECE UNDERGRAD

## CONTACT

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## PROFILE SUMMARY

Embedded Systems and IoT Engineering student with hands-on experience in C/C++, Python, and platforms like ESP32, Raspberry Pi, and Arduino. Solid foundation in electronics and system design., Also experienced in React Native app development, with a separate interest in mobile interfaces and cross-platform software. Continuously expanding my technical skills through coursework, personal projects, and practical experimentation.

## EDUCATION

2022 - Present

CHANDIGARH UNIVERSITY

- BE Electronics & Communications
- CGPA: 7.8 / 10

2017 - 2020

LOYOLA SECONDARY SCHOOL

- General Sciences

## SKILLS

- Embedded Systems:** ESP32, Arduino, STM32, UART, SPI, I2C, PWM
- IoT & Communication:** MQTT, HTTP, Flask
- Mobile Development:** React Native, Firebase Auth, Expo CLI, React Navigation
- Tools & DevOps:** Git, VSCode, STM32CubeIDE, Figma (UI Design), PlatformIO
- Programming:** C/C++, Python, JavaScript(Fundamentals)

## PROJECTS

### Budget Tracker App (React Native, Firebase)

**Tech Stack:** React Native + Expo, Firebase Auth, Async Storage

- Built a secure login/signup flow with Firebase authentication.
- Designed modular components for income/expense entry, history logs, data analytics and budget tracking.
- Stored and retrieved real-time data using Async Storage.

### Wireless Sensor Network using LoRa (IoT, Embedded Systems)

**Tech Stack:** ESP32, LoRa

- Built a low-power, long-range wireless sensor network using LoRa for efficient data transmission.
- Integrated sensors with microcontrollers for real-time environmental monitoring.

### End-to-End IoT Pipeline: ESP32 to Raspberry Pi Web Server

**Tech Stack:** ESP32, Raspberry Pi, Flask, HTTP, DHT11

- Built an end-to-end IoT pipeline where ESP32 collected sensor data (temperature, humidity).
- Transmitted data using HTTP POST to a Flask server hosted on Raspberry Pi.
- Visualized real-time data via a custom web dashboard using HTML+CSS.
- Ensured consistent data flow with retry logic and minimal latency.

## LANGUAGES

- English: Fluent
- Arabic: intermediate

## CERTIFICATIONS

- HTML & CSS Fundamentals - Meta (Coursera), 2025
- UX Design - Google (Coursera), 2025
- ESD ARM Cortex M4 - Pantech Solutions, 2023